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Charlotte Medical Journal.

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The Charlotte Medical Journal.

VOL. XXVIII. CHARLOTTE, N. C., JANUARY, 1906. No. 1

Present Status of Water Analysis in Connection with the Investigation of Typhoid Epidemics.*

By Ernest C. Levy, M. D., Richmond, Virginia, Director of Laboratory of City Water Department.

The frequency with which the writer receives inquiries from physicians in regard to examining water for typhoid bacilli is sufficient ground for believing that a brief paper dealing with the subject here chosen will have a certain amount of usefulness.

Knowing that where a given water is responsible for an outbreak of typhoid fever the bacilli of this disease must have been present in the water, and having only rather general ideas of the methods of bacteriological examination of water, what more natural than that the average physician should consider the actual finding of typhoid bacilli as the natural and crucial test in these cases? It is the object of this paper to show why this direct method of solving the question is not applicable, and, furthermore, to point out briefly just what the water expert of to-day does do in these cases, provided he can get his client to understand something of the matter—which end, in the writer's own experience, can always be accomplished by a plain statement of the facts in the case.

The first difficulty connected with placing the responsibility for an outbreak of typhoid fever by means of direct bacteriological examination for the detection of B. typhi lies in the fact that, assuming the water to have been the actual cause, it is impossible to get a sample of the right water for examination. The minimum period of incubation of typhoid fever is eight days, with an average period of two weeks. Hence, assuming a water supply to become infected, it is not until two weeks later that a sufficient number of cases of the disease have developed to attract considerable attention, and allowing (a liberal estimate) a week more for the physician or health officer to reflect on the subject and get into communication with the bacteriologist, it is three weeks altogether before the investigation is started. It is self-evident that, unless the pollution is a continuous one (which is not usually the case), the failure to find typhoid bacilli at this late date cannot be taken as indicating that the water was not originally infected and gave rise to the outbreak.

Coming now to the question of the actual examination of water for B. typhi, it is not at all difficult to explain why our methods are so imperfect. In almost every instance where a stream becomes infected by typhoid bacilli this stream receives at all times the fecal dejecta of a number of persons, and it is only when one of these individuals develops typhoid fever that the bacilli of this disease are added to the water, along with the continued fecal discharges of a number of unaffected persons. Now, even the dejecta of the typhoid patient himself contain B. coli (the normal inhabitant of the intestinal canal) in probably greater numbers than B. typhi, while still larger numbers of the former organism continue to enter the stream in the stools of the healthy inhabitants of the watershed. We must, therefore, realize that almost invariably a water which has become infected with B. typhi has, along with these organisms, an immensely larger number of B. coli, the only exception to this being where a water has become infected by the urine of a typhoid patient but is otherwise unpolluted—obviously a most unusual condition. Besides this, a water so polluted as the one we are considering in our typical case is certain to contain large numbers of bacteria of other kinds, so that for every typhoid bacillus present there are probably an immense number of bacteria of other varieties.

Let us assume a concrete illustration for the sake of making clearer the problem which confronts the bacteriologist in these cases. A water would surely be seriously infected if each glassful contained 20 typhoid bacilli, yet, since an ordinary drinking glass holds about 200 cubic centimeters, in this case there would be only a single typhoid bacillus in each 10 c. c. of the water. Such a water would almost certainly contain at least 200 bacteria of other kinds per c. c., or 2000 in the 10 c. c. In our hypothetical case, therefore, for each typhoid bacillus there would be 2000 other bacteria.

Under such conditions let us see what would be the chance of finding the typhoid bacilli. In the routine method of plating on gelatine, it would be necessary to make ten plates of one c. c. each in order to get a single colony of B. typhi (assuming the typhoid bacilli to be evenly distributed through the water), and after all the colonies have developed there are no characteristics by which a typhoid colony can be picked out on sight, while it is obviously impossible to make the necessary detailed

*Read before the Medical Society of Virginia at its thirty-sixth annual meeting, Norfolk, October 24-27, 1905.

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study of so large a number of colonies as would be necessary to identify the typhoid colony from others resembling it. If instead of gelatine we use agar and incubate at 37 degrees Cent., a smaller number of total colonies will develop, but even here it would be impossible to tell if one of these was B. typhi, except by a most tedious and practically impossible detailed study of hundreds of colonies.

Evidently, then, simple plating is not to be considered as a means of detecting typhoid bacilli in water, and we are brought to look into whether there can be found some differential method which will allow the typhoid bacilli, if present, to develop, while restraining the numerous other forms which must always be conceived as being present. Many methods of this sort have been suggested from time to time, but not one of them is to be relied on, the chief difficulty being that the colon bacillus, always present, is much hardier than the typhoid bacillus, and no means are yet known of inhibiting the growth of the former and still permitting the latter to proliferate. It must be made clear that there is no difficulty in differentiating B. coli from B. typhi when cultures of each are at hand, but the problem is to obtain the latter at all in the presence of large numbers of the former and larger numbers of bacteria of still other kinds.

Recognizing that one of our difficulties is the fact that so large an amount of water must be examined to find even a single typhoid bacillus, it has been recommended to pass a considerable amount of water through a porcelain filter and then take for examination some of the scrapings from the filter, which will then contain, in small bulk, all the bacteria originally present in the water. As a matter of fact this in no wise lessens our troubles, for we now have an enormously increased number of B. coli and other bacteria to deal with, and this, as pointed out above, is our greatest difficulty after all.

If, following any of the very doubtful methods which have been proposed, the bacteriologist at last secures what he suspects may be a culture of B. typhi, the further task of making certain of this point is by no means an easy one. B. typhi is distinguished largely by negative characteristics, both morphological and cultural, nor is it pathogenic in a true sense for any of our laboratory animals. Even the serum reaction, lauded as specific when first brought out, has come to be recognized as a test demanding the utmost care in technique and in interpretation.

Owing, then, to the difficulties above hastily outlined, an experienced man in this branch of sanitary science will not undertake to examine a water at all for B. typhi, or at any rate he will stake nothing on the result. But, while the problem cannot be solved in this direct manner, still it is possible in nearly every instance to arrive at results in a different way, and this true method of approach is, after all, of far greater value than a mere finding or not finding of typhoid bacilli in the water could possibly be.

The correct way of solving the problem, as matters stand, is to make a thorough study of each specific case which arises, along well recognized lines. Briefly, this includes a sanitary survey of the watershed, a study of the epidemic itself, and a bacteriological and chemical examination of the water. The sanitary survey is to be regarded as an indispensable factor in every case of importance, and as such it cannot be entrusted to anyone who has not had special training in just this kind of work. Each case presents its own peculiarities, and some point which it is impossible to foresee may give the clue to the whole situation.

Along with this sanitary survey, inquiry should be made into the special features of the epidemic itself. To do this thoroughly is the work of weeks, or even months, in the case of large communities and extensive epidemics, but sufficient information for practical purposes may frequently be gained in a few hours of intelligent study in smaller communities, especially if the local physicians' records are fairly complete.

This visit to the seat of the trouble, moreover, enables us to judge of just what samples we wish to have for analysis and to collect these under the best conditions and with proper precautions. It also enables us to start certain parts of the bacteriological work on the spot, which is a matter of no little moment if at some distance from the laboratory. The tests which will be applied are, in a broad sense, for the determination of fecal pollution in general. Both chemistry and bacteriology are called upon, but the chief thing is the detection of intestinal bacteria.

After getting together all the facts both of the analysis and of the sanitary survey and special study, a careful consideration of all the data thus available will, in almost every instance, lead to a thoroughly trustworthy opinion. It is just at this part of the work that judgment and experience come most into play. The data at hand are to expert in this line what the previous history, symptoms and physical signs are to the physician in arriving at a diagnosis, and each reaches his final opinion by a careful weighing of all the evidence and not by

blind reliance upon any isolated fact.

This simile may be carried further. Certain cases of disease may be diagnosticated by a laboratory test of material secured from the patient, as, for instance, is possible by a sputum examination in cases of pulmonary tuberculosis, but no physician would care to take the responsibility of treating a case of consumption merely on the evidence thus afforded, without examining the patient and learning a great deal about his general condition and his environment. Just so, the water expert may often be able to decide by analytical methods whether or not the water is polluted, but knowledge so gained is always of a general character, and personal study of the case on the ground is necessary for the correction of existing conditions.

We may apply our simile, furthermore, to negative cases. Where a sputum examination does not show tubercle bacilli but where the patient is nevertheless seriously ill, the examination will show little of what the real condition is. So with water, finding that, so far as a mere laboratory examination can ever show, the water is all right, but if, in spite of this, typhoid fever has been very prevalent, our examination is of value merely by the probable elimination of the water as a cause, but it has thrown no light whatever on what is responsible for the trouble. And, again, our work would be incomplete and misleading where the water was only one of several causes. By means of a personal survey, if the water was found not responsible or responsible only in part, the search would be continued to arrive at every factor in the case.

A recent case of the writer's illustrates several of the points above made:

Typhoid fever had been prevalent in the town of Virgilina, Va., for several years, no true epidemic, but nearly always on hand a large number of cases in proportion to the population. Towards the end of last March, Dr. F. D. Drewry, one of the two physicians of the place, requested Dr. Ennion G. Williams, of this city, to examine the water of a number of local wells for the presence of typhoid bacilli. Dr. Williams referred the case to the writer, who promptly explained the futility of trying to arrive at a solution of the problem in this manner and suggested a personal survey of the conditions. This was consented to, and a day was spent there, about April 1st, looking over the situation and going over the history of the cases with Dr. Drewry. Five samples of well water were brought back for examination. As a result of this study it was apparent that one of the wells was utterly unfit for use and it was unqualifiedly condemned. A second one was found very bad. The others, while not all that could be desired, were, owing to the peculiar geological features of the section, the best that could probably be gotten under the circumstances and were considered reasonably safe after making some changes. But it was also evident that factors other than the water had been responsible for many of the cases. Hence the writer recommended the adoption of certain other sanitary measures. In a letter received from Dr. Drewry on the 16th of the present month (that is, over six months after the investigation) the statement is made that there has not been a case of typhoid fever in Virgilina since these recommendations were made.

Naturally, a complete cessation of typhoid fever, such as has been secured in this instance up to the present time, is too much to expect in most cases, even after the most thorough protective measures have been adopted, but the more complete the study, the more intelligent the advice which can be given and the more perfect the results. Eternal vigilance being the price of safety, before long these people will doubtless gradually begin to lose that caution which has so far been protecting them and will pay the natural penalty for so doing.

The main points in the foregoing paper may be briefly summed up as follows:

(1) No satisfactory method is known for the detection of B. typhi in water.

(2) Were such a method known, it would be of limited application on account of the fact that when an outbreak of typhoid fever leads to an investigation, the water supposed to have been infected is no longer available for examination.

(3) Although the direct detection of B. typhi in water is impossible, yet the importance of bacteriological and chemical examination of the suspected water must not be underestimated, but it should be combined with a thorough sanitary survey of the field and a competent study of the phases of the epidemic. This will almost invariably solve the question whether the outbreak was caused by drinking-water.

(4) This method of attacking the problem has the further advantage of throwing light on the sanitary quality of the water in question apart from the special outbreak of typhoid fever, and, moreover, if it is found that the water is not responsible, or responsible only in part, full information will be gained along many lines, thereby suggesting the steps to be taken for future protection.

Vernal Conjunctivitis in the Negro.

By Dunbar Roy, M. D., Clinical Professor of Diseases of the Eye, Ear, Nose and Throat in Atlanta College of Physicians and Surgeons, Atlanta, Ga.

I have been very much interested in the article read by Dr. Posey on "Vernal Conjunctivitis" at the New Orleans meeting of the American Medical Association, and even more so by the various discussions which followed the reading of this most excellent paper. It certainly, more than ever before, made me cognizant of the fact that either the character of such cases differs very materially in different sections of the country, or that each observer sees things objectively in a very different manner. I suppose that there is no way of ever finding out whether objects appear universally alike to all individuals, unless the same were reproduced again by drawings, and as few among us have this artistic skill we must be content with verbal representations. The fact that the same type of disease differs in various localities is universally conceded, such being due not only to the elements of what we call climate, but also to the environments and modes of living among the people.

When one from a Southern or Western city visits the large clinics in New York, he sees a distinct type of cases which he never has nor ever will see in his practice at home. Even in my own state these differences are noted. In Atlanta, with an elevation of 1,200 feet and clay soil, the type of eye cases differ from those seen in Savannah, where the elevation is low and the soil sandy. The same differences exist between Atlanta and New Orleans. Hence I feel that it is never right to criticise a fellow practitioner because he gives symptoms of supposedly the same disease as quite different from those seen by you in your own locality. Consequently I take it for granted that the wide difference of opinions expressed in the discussion of Dr. Posey's paper, was due largely to the fact that the speakers represented different sections of the country.

During the last eight years in a large outdoor clinic at the Atlanta College of Physicians and Surgeons, nine-tenths of whose patients are colored, I have observed ten cases which I have designated and so entered in their histories as circumcorneal hypertrophy of the conjunctiva. In the study of these cases they have been found to represent the so-called vernal catarrh at least so far as we can find a composite group of symptoms, for one is bewildered at the varied subjective and objective symptoms which he finds described by various observers as representing the type of these cases. In all of my cases they represented the so-called bulbar form. In not a single instance has the palpebral portion of the conjunctiva shown any marked pathological changes. In every case there was a most minute examination of the conjunctiva upon the upper and lower lids and beyond some congestion and redness these surfaces presented a most normal appearance.

Without narrating the history of each individual case, I shall speak of them all under one general group because of the similarity of most of the symptoms, both objective and subjective, and only individualize where there were some features distinctly prominent and different from the rest of the group. The prominent fact must be borne in mind that all of these cases occurred among negroes, notwithstanding the fact that we sometimes see the statement made that vernal catarrh does not occur among this race of people, just as the misstatement is also made that this same race is not afflicted with adenoids in the nasopharynx. The only reason for the existence of these different opinions among Southern observers must be due, as I have said before, to the fact that the type of cases differs in different localities.

Age.—The youngest in these 10 cases was 3 years and the oldest 25, the majority of them being between 6 and 12 years.

Sex.—Practically no difference was found on this point, 6 being males and 4 females.

Type.—The 10 cases were all of that form designated as bulbar and I have never seen in my city a case where the palpebral conjunctiva showed changes similar to those described by other observers.

Symptoms.—These were quite characteristic in every case, differing only in the extent of involvement. In only one was this their first attack, all of the remaining having suffered with the disease from 2 to 5 years.

The subjective symptoms were by no means prominent, those usually complained of being photophobia, a heavy feeling, burning and gritty sensation about the lids, but in none of them was there any marked discomfort.

The objective symptoms were more characteristic. In those suffering from the first attack there was some congestion of both the bulbar and palpebral conjunctiva, with some signs of a catarrhal discharge. The palpebral conjunctiva showed no changes beyond that of congestion. On the ball, at the sclero-corneal margin, there was an elevated, circular, waxy and gelatinous looking mass, extending from one-half millimeter to even 4 millimeters into the cornea, and which was always widest at the upper and lower margins of the cornea. This

latter characteristic was evidently due to the mechanical action of the lids, rubbing back and forth, causing an undue irritation and a further extension of the hyperplasia. In one case, the ring of hyperplasia extended so far on the cornea that there were left only bits of clear cornea about 4 millimeters in diameter at the lower left quadrants, so that the patient holds his head to one side in order to see. At that portion of the cornea where the membrane stops there were absolutely no signs of a present or even a former involvement of this structure in inflammation.

Pigmentation at the conjunctival edge of the hyperplasia was by no means infrequent, for pigmentation in the conjunctiva, especially in the superficial thickened layers at the inner and outer canthi, is a common occurrence in the negro race.

One peculiarity noted in several of these cases showing this pigmentation was the fact that the pigmentary layer of the skin on both the upper and lower lids made this region very much darker than the surrounding areas, giving the patient the appearance of dark circles around the eyes. In no other class of cases have I noted this peculiarity in the negro race.

Where the ring of hyperplasia had extended to any marked degree upon the cornea, the eye was cocainized and an attempt made to see whether the gelatinous mass was really a part of the superficial layers of the cornea or only an outgrowth from the conjunctiva and resting upon it as a distinct membrane. In every case it was seen that this hyperplasia was practically a part of the cornea itself and could not be separated from it without cutting or shaving it with an angular keratome. Pieces were in this way removed as deeply as possible and submitted to Professor H. F. Harris for examination. His report is as follows:

Specimens were fixed in Heidenhan's bichlorid of mercury solution. Specimens were embedded in paraffin, cut and sections stained with hæmatein, iron-hematoxylin (Heidenhain's), carmalum with picric acid, gentian violet by Van Gieson's method, Unna's alkaline methylene blue differentiated in his fuchsin-tannic acid, and finally carbol-toluidin blue, which proved to be the best solution for staining.

The specimens did not include any of the corneal tissue proper, although a portion of the adjoining healthy conjunctiva was embraced in the sections. On microscopic examination, the neighboring healthy epithelial covering of the cornea was found to be normal, but as the diseased region was approached areas were encountered in which many of the epithelial cells of this layer were found to have lost their usual structure; the cells were swollen and their contents consisted of a granular detritus in which the nuclei may or may not have been more or less preserved and in addition to this the cells evidently in life contained more or less liquid.

In this area the epithelial layer was in many cases greatly thinned, this being the case to such an extent that it was often not more than one-third of its usual thckness. In the lower layers of this membrane, numerous eosinophile cells were found between the epithelial cells. In this region and also in that covering the lesion, pigment cells were not so numerous as in the normal areas.

Projecting down into the deeper tissues there were numerous ingrowths of the surface epithelial layer. At the point where these connect with the surface membrane, they generally consisted of masses of epithelium that were made up of two to four cells; but as these prolongations extended further downward they terminated in clubbed extremities, which were frequently from 15 to 20 cells across—some of them being as much as 0.175 mm. in diameter.

Beginning a short distance below the point where these pillars originated, there often began a more or less centrally located opening which enlarged as it passed downward and terminated in a rather long central cavity in the bulbous extremity of the projection. Oftentimes these cavities were found entirely empty, but in other instances desquamated cells and granular debris were encountered within them. These cavities were always separated by at least two epithelial cells from the surrounding tissues and ofttimes there were as many as three, four or five elements intervening.

From the lower surface of the epithelial layer to the extreme limit of these projections there was a distance from 0.125 to 0.225 mm. In their beginning portions, the cells composing these projections, resembled in every way the cells of the lower layer of the epithelial membrane of the cornea; but lower down they were more irregular in form and separated from each other by minute interspaces: the cells here resembled very much those in the Malpighian layer of the skin, though as to whether they were united to each other as are these cells, could not be stated with certainty.

Lying within these groups of cells, very peculiar bodies were encountered; they were apparently swollen epithelial cells, having a diameter about 0.020 mm., within which there was apparently in life a clear fluid where there was suspended an oval body measuring about 0.010 mm. in diameter, and which stained throughout with nuclear dyes and contained towards its cen-

ter what was apparently a nucleolus. As to the true nature of these bodies nothing can be said with certainty, they were probably the result of cell degeneration, but bore a very close resemblance to some animal parasites.

These projections were limited externally by a layer of very small cells containing spindle shaped nuclei. Between these epithelial ingrowths and extending between them and the surface layer of epithelium were multitudes of lymphoid and plasma cells and a considerable number of eosinophile cells. In the deeper portions of the specimen there was found some newly formed fibrous tissue.

SUMMARY.

Principal alterations were:

1. Localized thinning of the surface layer of epithelium; the swelling and vacuolization of many of these elements; the presence of eosinople cells between these elements.

2. The projection downward into the deeper structures, club shaped columns of epithelium containing usually more or less centrally located cavities.

3. The presence in these cells of peculiar bodies which may be the result of degeneration of these bodies, or possibly parasites.

4. The presence between these columns of enormous numbers of plasma and lymphoid cells, quite a number of eosinophile cells and some newly formed fibrous tissues.

The type of these cases was so characteristic and the results in the treatment so unsatisfactory that one was compelled to recognize them as a distinct entity. The fact that such patients always applied to the clinic during the warm months made me recognize the disease as characteristic of this season. Nor was this affection limited to those with frail constitutions, or to such as presented symptoms of scrofula or hereditary syphilis, but in most cases they were in subjects who appeared healthy in every other respect. In two cases the patients belonged to the same family, but my observations do not lead me to the conclusion that it is hereditary.

The extent of the circumcorneal lesion varied greatly. In some the gelatinous lymphoid elevation was so slight that it could only be seen by having the light to fall upon the eyes at a certain angle, while in others the cornea would be encroached upon to the extent of several millimeters. In those cases where the disease had been periodically present from one to three years and which were seen during the interval, i. e., during the winter, the peripheral edges of the cornea showed changes resembling arcus senilis, indicating that the superficial layers of the cornea were also involved in the pathological process. Severa cases were seen where the aetive process had ceased previously and only this latter condition remained, but such cases are not considered in this paper.

At the New Orleans meeting referred to, Dr. Posey's thorough paper on this subject was very freely discussed and very various opinions and observations were there expressed. Dr. Bruns, in the discussion, said that he had never seen a case of vernal conjunctivitis among the negro race in which opinion Dr. Claiborn agreed, and that the cases so reported were nothing more than a form of phlyctenular conjunctivitis. In my own clinic I have also recognized the fact that phlyctenular conjunctivitis in various forms was common in the negro race, but the cases here reported were certainly of a very different type and quite similar to cases of the bulbar form of vernal catarrh seen in the European clinics.

Dr. Bruns' argument that such cases as these were phlyctenular, to use his own language, because of "the transient nature of the disease, the readiness with which it seems to yield to simple treatment, the local application of mercury and the internal administration of small doses, together with keeping the conjunctiva clean, suffice to bring about a cure in a very short time," is the very reason why his cases do not correspond with those seen by me. My own experience shows that these cases are not transient but have recurred and persisted every year during the warm months; that they have not yielded to simple treatment or even successfully to any treatment, although every method has been tried, and that, furthermore, distinct changes can be seen in the periphery of the cornea after the active process has subsided. I believe that these cases are more common than is to be supposed, the trouble being that they are often treated for something else. I have had two cases brought to my clinic, one of which was being treated for granular lids and the other for a simple conjunctivitis, both having been treated for two years, but only during the summer months.

It is almost a matter of impossibility to say in just what proportion of conjunctival diseases cases of vernal catarrh occur among the negro race, for it is a well-known fact that this race of people never consult an eye clinic until the disease has so far involved the eye as to occasion great pain and suffering. Ordinary conjunctivitis is usually allowed to run its course unless it becomes purulent in character and frequently these cases wait until the cornea is already seriously affected. Consequently I am in no position to affirm or deny Posey's estimate of one case in every two to five hundred

conjunctival diseases. Furthermore, in only two out of ten cases was this their first attack, for it was only after a persistent recurrence that they could be brought to the point of seeking relief. The few cases seen among the white race showed very much more the signs of inflammatory congestion about the bulbar conjunctiva than that seen among the negroes, consequently the disagreeable subjective symptoms were more pronounced in the former than in the latter. In regard to the treatment, nothing can be added to the long list of remedies proposed and which has been fully mentioned by Posey. Mild applications were used, caustics were tried and even surgical intervention was resorted to. In three of the worst cases, where the circumcorneal gelatinous mass was the largest, this was shaved off with a knife and afterwards the surface touched with a strong solution of nitrate of silver. This was successful in seeming to arrest the progress of the disease. By the use of a mild astringent wash of sulphate of zinc, adrenalin chlorid and water, together with the daily massage of the ball with the yellow ointment, the acute symptoms could usually be kept under control until the cool weather would cause a cessation entirely of the acute process.

Under such treatment I found that the severity of the symptoms decreased each season and after three or four years there was very little trouble. Whether the remedies used were responsible for this betterment or that the disease is more or less self-limited and runs its own course, I am unable to say. In the severest forms, i. e., where the ring of hyperplasia is very broad without any marked acute inflammatory congestion, I am fully convinced that surgical removal of the hyperplasia is the best mode of procedure, to be followed with continuous application of milder remedies.

Exterminate the Mosquito.

By Dr. Robert C. Campbell, Shreveport, La.

It is astonishing how quickly we will forget our very trying experience during the past summer in fighting off the invasion of yellow fever. It is well to forget the unpleasant part of our experience, but we should not allow ourselves to become dormant and not be prepared for future trying ordeals if they should come, and as the mosquito has been such a prominent factor in widely spreading yellow fever, I will present some practical facts which have a decided bearing on the work of exterminating this very molesting and injurious insect.

At first our efforts to exterminate the mosquito in this country were looked on from a humorous point of view, and but little aid or co-operation was extended by the laity. Recently a very decided and satisfactory change has taken place in the attitude of the public towards this important subject; they are learning that the object of this work is not only to prevent the annoyance which the bite of this pernicious insect produces, but also to prevent the transmission of diseases.

A general impression exists that the life of the mosquito is very short, living only a few days—that belief is a great error, as it is positively known that it will live many weeks in captivity, and in the hibernating stage it will live from fall to the following spring and during the warm weather.

It is practically impossible to arrive at a definite conclusion in regard to the life cycle of the mosquito, as experiments have not furnished satisfactory evidence as they cannot be carried out under the same conditions that naturally exist. It has been generally believed that the first crop of mosquitoes which appear in the spring, are from the eggs deposited in the fall, which remain dormant or hibernate until the following spring when they become active and are hatched, developed into the larvae, and subsequently, into the winged insect. That is one source of our spring crop of mosquitoes, but I believe the winged insect which has hibernated through the winter plays a far more important part in giving us the early crop of this pernicious insect; consequently, we should use every means possible to exterminate the mosquito in the fall and watch your homes closely in early spring and destroy every winged insect as she awakes from her winter's nap.

In the extermination of the mosquito we must be familiar with certain habits or conditions of this insect, their breeding places and manner of propagation, otherwise, our efforts are not apt to be attended with success.

The study of the life and habits of the mosquito, not only in their adult stage, but in their cycle of development from the egg to the mosquito, is one of the most interesting subjects that a person who is prepared and has time to take up, can undertake.

Not only is the subject fascinating, but it is also of very great importance that the life and history of all species of mosquitoes should be understood, as it has been proven beyond a doubt that they play a prominent part in the transmission of diseases to human beings. Especially is this true of malarial fever, yellow fever and filariasis. We have several species here, but the most important to us at the present time are the Stegomyia Fasciata and the Anopheles. They play such a prominent part in the transmission of yellow and malarial fevers that they should be studied with care and

become familiar to all.

Europe has awakened to the importance of studying this pestiferous insect in all its phases, but they are still far behind America.

Look at the good work done in Cuba. Before the Spanish war, Havana was a hot bed of yellow fever eight to nine months in the year. The city is now free from the dread disease. See what is being done in Panama. Before the United States acquired the Isthmus of Panama, yellow fever was raging there throughout the entire year. Not a case has been reported in the past two months.

All of this good work has been accomplished by proper sanitary measures and destruction of the mosquitoes under the supervision of American physicians. Look at the important and effective work done this year in New Orleans and other places by the Marine Hospital Surgeons. The epidemic of yellow fever this year has most emphatically proven that the mosquito was instrumental in transmitting the dread disease to many different places and spreading it widely. The towns that took active part in cleaning up, oiling and screening cisterns and destroying other breeding places of the mosquito in the early stage of the outbreak of the fever in New Orleans, escaped entirely, or only had a few imported cases; whereas, the towns that were indifferent or did not believe the mosquito capable of transmitting the disease, and made no effort to place things in a sanitary condition and destroy the mosquito and its breeding places, have suffered very severely for their indifference and prejudice.

Many residents of Shreveport remember the sad and terrible epidemics of yellow fever in 1867 and 1873, and when it broke out in New Orleans this summer they immediately awoke to the danger to Shreveport and bestirred themselves to active measures in cleaning up the city, cutting weeds and grass, oiling and screening cisterns, rain water barrels, etc., destroying the mosquitoes in every possible way and putting the city in a first-class sanitary condition. The Board of Health established and provisioned a detention camp just outside the city limits. Hundreds of citizens volunteered to act as guards.

There are many intelligent people here who did not believe in the mosquito theory of transmitting diseases from one person to another but they recognize that the mosquito is a very molesting insect and were willing and did extend a helping hand to destroy it.

Yellow fever came knocking at the gates of the city, but it was not allowed to enter, and there was no pernicious winged insect left to carry its deadly lance over the barricade—oil and fumigation had done their work. The city can rejoice over its victory. All honor to the noble men who stood shoulder to shoulder in the fight against the invasion of the dreaded Yellow Jack.

Cisterns, rain-water barrels, and pools of clear rain-water are the favored breeding places of the Anopholes and Stegomyia Fasciata, but deprived of those places, they will seed and breed in culverts, ditches, pools, gutters of unpaved streets when overgrown with grass and weeds, tin cans, flower pots, or any little pool of surface water, even if it is polluted.

I have seen hundreds of wriggers in small holes or depressions that did not hold a small teacupful of water. Sometimes these little holes dry up quickly, but not before the mosquito deposits her eggs in them—they will lie dormant until the holes are again filled with water—then they hatch in a very short time.

Mosquitoes were greatly thinned out for awhile after the city had been placed in a fair sanitary condition—grass and weeds cut, cisterns and barrels oiled and screened—but they sought new breeding places, and by the last of August the air and houses were again alive with them. Dr. Schumpert, President of the Board of Health, requested me to take charge of the small sanitary force under Mr. Wimbish, seek out and destroy all breeding places and abate all cess-pools and other unsanitary places. I took charge of the force on the 28th of August and commenced work immediately. In my investigations, I found the culverts, ditches, gutters of unpaved streets, and other places alive with wrigglers from the tiny wriggler just hatched to those in the pupa stage. I found the culverts and catching basins alive with mosquitoes, also ditches overgrown with grass and weeds.

The water works company were in the habit of turning on the hydrants on the unpaved streets two to three times a week and letting them run for from fifteen to thirty minutes. Where there was not a steep grade the water would fill the gutters, and before it sank into the earth or evaporated, it would be renewed. The constant moisture and heat caused the grass and weeds to grow rapidly, consequently, the mosquito could not find a much more suitable breeding place.

Some time previous to my assuming supervision over the sanitary force, the city had ordered ten barrels of Beaumont oil (crude petroleum). It was distributed to different parts of the city for the purpose of oiling ditches, pools and cisterns of those persons unable to purchase it.

We could only find one and a half barrels and I could see very little trace of where

the oil had been used. I immediately ordered ten barrels more, which was used systematically; had the grass and weeds cut from the edge of ditches and oiled them, using sprinkling pots for spreading the oil; cleaned and oiled all gutters, pools, culverts and catching basins where mosquitoes bred and harbored. The large culverts were not only oiled, but fumigated with sulphur; had the railroads entering the city look after their culverts and clean and screen their catching basins.

When I retired from the inspection and supervision of the sanitary work on the 20th of September, Shreveport was the cleanest and freest of mosquitoes of any city in the South.

To keep the city free from mosquitoes in the future, all barrels and tubs for catching rain water should be prohibited; wooden culverts and drains should be abolished, cisterns permanently screened, and the city should begin in the spring to fill up all ponds and pools, keep the culverts and ditches clean and oiled throughout the spring, summer and fall, watching and abolishing all cess-pools. You will not only keep the city in a first-class sanitary condition, but the general health will be greatly benefited, and we will be free from the deadly Anopheles and Stegomyia.

Acute Dilatation of the Heart; Diagnosis and Treatment.

By J. Garnett Nelson, M. A., M. D., Chief of Medical Clinic at the University College of Medicine, Richmond, Va.

Before speaking of the diagnosis of cardiac dilatation it is proper to mention briefly the normal position and size of the heart. Where is the outline of this organ when projected on the anterior surface of the chest? For practical purposes this figure can be best traced by thinking of it as a quadrilateral, viz: A straight line running from the right sixth costal cartilage and sternum to a point in the left fifth interspace one-half inch within the midclavicular line forms the base. A line running up from the origin of the base line to the right of the sternum approximately in the arc of a circle three inches in diameter to the upper border of the right costal cartilage one-half inch from the sternum forms one side. The other side runs from the point in the left fifth interspace, already designated, approximately in the arc of a circle seven inches in diameter to a point on the upper border of the third left costal cartilage one inch from the sternum. The upper line joins the two points on the third costal cartilages, forming at the same time the base line of the great vessel area. Unless the heart can be included in these four lines there is an anatomical error in size or position.

The subjective symptoms of acute dilatation are dyspnoea, and an alarming sensation of impending death, together with a sense of praecordial discomfort.

The objective symptoms are elicited by the four divisions of a systematic examination that should always be employed when our attention is directed to the heart, namely, inspection, palpation, percussion, and auscultation, or a combination of two or more of these, as palpatory percussion, or auscultatory percussion.

Inspection reveals several points of interest. In the first place on entering the room of a patient suffering with acute heart strain we are impressed with the fact that he is in a state of great alarm. We find him usually in the semi recumbent position, breathing with great difficulty, his lips and hands blue, and his foaehead, perhaps, covered with perspiration. Such a state of affairs, developing suddenly in a person apparently in fairly good health, suggests some cardiac trouble. On loosening the clothes and inspecting the thorax we are still more impressed with the respiratory difficulty, and may search in vain for evidence of cardiac impulse, indeed this fact that we are unable to see any impulse is important in confirming our diagnosis. So much for inspection. Palpation may also prove more or less negative. Sometimes we are entirely unable to feel the apex beat, and at others we find it soft, diffused and most clearly defined in the sixth interspace, and an inch or two to the left of the midclavicular line. The pulse, unless there is marked sclerosis, is soft, compressible, and rapid. There is hypotension. Percussion is very useful, indeed it is the only method of getting an exact idea of the heart's size. The method to be employed depends on the habit and skill of the examiner. For nice work palpatory-percussion is, perhaps, most valuable. The ball, not the end, of one finger should be used. The stroke must be made directly on the body with a fair amount of force, and the finger pressed firmly against the patient, especial attention being paid to the resistance offered as well as the sound. The knowledge of enlargement gotten from finding by palpation the displaced apex beat is now confirmed. Here a very important question arises. Is the apex beat practically at the limit of the deep seated dulness, or does the dulness extend some distance beyond the apex beat? The answer to this question gives us our most reliable means of differentiating between enlargement and an accumulation of fluid within the pericardium. Of course finding the dulness well beyond the apex

beat indicates fluid. However, this question is not so apt to be presented to us in cases of acute dilatation.

In order to still further confirm our diagnosis auslcutation must be practised. Usually the sharp, clear cut sounds of the heart have been lost, or replaced by soft blowing murmurs. Sometimes the valvular element is entirely lost. This diminution of the heart sounds is, however, not always found. For instance, if in the case of a chronic dilatation of the left ventricle with loud mitral murmurs but with good compensation, an acute dilatation of the right side occurs, we may still hear distinctly the aortic second sound as well as the old murmur. The sudden loss of distinctness is often well illustrated in pulmonary diseases, especially pneumonia. Here it is safe to say that as long as the pulmonary second sound is clear and sharp the right side of the heart is not being overworked, but if the distinctness of this sound be replaced by a regurgitant softening, the muscle of the right heart is giving away and relief must be undertaken immediately.

The diagnosis of acute dilatation being made, what are we to do? Very happy results are often obtained in these cases by the simplest measures. Put the patient in a comfortable position, as near recumbent as possible, loosen all tight clothing, allow a plenty of fresh air, get rid of exciting friends and relatives, see that the bladder and bowels are empty, using a catheter and enema if necessary, and give a diffusible stimulant and the majority of these cases will soon be out of immediate danger. In some, however, we must resort to more heroic measures. Of the drugs that are useful adrenalin chlorid, digitalis, strychnine, strophanthus, spartein and caffein are valuable in the order named. It seems that as an emergency remedy adrenalin chlorid is a sheet anchor. It may be given hypodermically, but oxydation takes place so rapidly that it must be repeated very frequently, and by this is meant as often as every fifteen or twenty minutes for several hours, giving about ten drops of a one to one-thousandth solution at a time. If we pass the danger point of immediate death in safety, a desire for some means of continuing our advantage is best satisfied by digitalis, and we must not be afraid to use a plenty of it. There need be no fear of the so-called cumulative action if the rate, rhythm and tension of the pulse are watched carefully. Probably the best adjurant to the drugs used for their immediate effect upon the heart and arteries is calomel. Unload the portal system, and accomplish free activity of the kidneys and bowels and the majority of these cases will be saved.

The Importance of the Early Detection of Middle Ear Complications in Acute Diseases.

By B. R. Kennon, Norfolk, Va.

I am aware that aural complications have been frequently discussed in the last few years, but the importance of an early detection of suppurative disease of the middle ear is my apology for again bringing this subject to the attention of the profession.

It happens frequently in many acute diseases that the condition seems to be clearing up when there is an exacerbation of temperature for which we are unable to account.

There is a general, though erroneous, impression that children always have earache and show evidences of it whenever there is a collection of pus in the middle ear, by crying, tugging at ears, moving the head from side to side, etc.

The only constant symptom of middle ear suppuration is some rise in temperature, varying from 100 to 106, and I have repeatedly seen pus rupture the membrane and appear at the meatus without apparently one bit of pain. This being the case if frequent examinations of the ears are made it will often be found that there is an acute suppurative otitis media, which if allowed to go on may lead to a destruction of the drum membrane with permanent loss of hearing or to mastoid and intracranial complications with their serious consequences.

If the general practitioner will provide himself with a set of ear specula and a head mirror and make frequent examinations of the ear he will soon become sufficiently familiar with the appearances to be looked for and in a short time acquire sufficient skill to enable him to make any ordinary diagnosis. A few words in regard to this examination.

A very important thing is to get the canal clean, so that the view of the tympanic membrane is not obstructed by cerumen, epithelial debris, etc. This is usually easily accomplished by syringing out the canal with warm sterile water. Should this not be efficient on account of the hardening of the wax a few drops of hydrogen peroxide instilled and allowed to remain for a few minutes, followed by the syringing as described above will very effectually clean out the canal. Should the tympanic membrane be already ruptured the hydrogen peroxide should not be used, as it is then unnecessary and may force the pus from the middle ear into the mastoid autrum and cause a mastoidetis. I have seen this happen in several instances.

Another important point in the use of the aural speculum is not to use one of too large a calibre, as the examination is much easier

and more thorough with a small speculum than with one too large for the canal.

Another mistake frequently made in the examination of children is that the auricle is pulled backward and upward as is usually directed in the books for the examination of adults, whereas in children to straighten the canal the auricle should be pulled backward and downward.

A condition which is very misleading, is, that when we look into the ear the membrane looks dull and white instead of red and angry as would be expected; unless great care is taken we are misled into thinking that there is no supperation in the ear.

The above appearance is due to the inflammatory process causing a rapid disquamation of the epithelial cells. which if gently wiped away shows the angry bulging membrane.

The diseases which are especially prone to cause middle ear complications are typhoid fever, measles, scarlet fever, pneumonia, influenza, tonsilittis. and last and most important an ordinary cold.

All of us pay entirely too little attention to colds in the head, thinking that they will get well if let alone and that nothing can be done for them. This is the greatest mistake and this is especially true in children, many of whom have adenoids, which increase the liability to cold and having produced the cold increase the liability to aural suppuration. When a child has a cold it is best to confine it to the bed for 24 hours, give a brisk purge, and then to the house until the acute symptoms have subsided. If this is done the number of cases of aural suppuration will be greatly lessened. In addition to this the nose should be sprayed every 3 hours with some antiseptic wash; a mixture of Menthol, Eucalyptol, Camphor and Albolin being very satisfactory in my experience. Often in children it is almost impossible to use a spray, in which case I direct that the same mixture be instilled into each nostril with a medicine dropper, with the child flat of its back. The medicament will then spread itself over the nose and nasopharynx. After the ear attack has begun it may often be cut short before the formation of pus by putting the child to bed, administering a purge and instilling a mixture of Tincture Opii, Tincture Belladonnae, Cocaine, Glycerine and water as warm as the patient can bear and covering the ear with a warm woolen cloth.

After the formation of pus the only thing to do, to relieve pain, lessen the liability to mastoid and intracranial involvement and lessen the chances of permanent deafness, is to incise the membrane thoroughly and after that to keep the ear as clean as possible by syringing as often as necessary with some warm antiseptic solution.

In cases of children with adenoids it is of the greatest importance to remove the adenoids before the winter season for these growths cause 19-20 of ear troubles in children.

I fear that many of you will think that the specialist in diseases of the ear, nose, and throat attaches too much importance to the removal of adenoids and tonsils, but it is impossible to overestimate the bad effects of these growths. They not only cause the very large percentage of suppurative conditions as mentioned above, but are also responsible for a majority of the chronic catarrhal cases which come on later in life and produce most cases of incurable deafness.

We will now consider the subject in relation to the various acute diseases beginning with typhoid fever. Day and Jackson of Pittsburg examined the ears in 708 typhoid cases in hospital practice and in this number f and 88 or 11.3% of purulent otitis media, and of this number 26 or 29½% went on to mastoid involvement. You will thus realize how important it is to keep a close watch on the ears in typhoid. The course of the mastoiditis was also peculiar in that after the formation of the pus in the mastoid there was no tenderness. This is of extreme importance, for tenderness is, in my opinion, our most trustworthy symptom in mastoidetis. Another important point is that in all the cases of suppurative otitis media in which it was necessary to remove the pillow and raise the foot of the bed after hemorrhage, syncope, etc., there developed a mastoiditis probably due to this position causing the mastoid antrum to be lower than the tympanic cavity; a point to be kept in mind so that if a case of typhoid has suppurative otitis media the foot of the bed should not be raised unless absolutely necessary.

Measles.—In measles the importance of an early recognition of middle ear suppuration and incision of the tympanic membrane is probably more important than in any of the other acute infectious diseases, except perhaps influenza; for in measles there is a greater liability to middle ear suppuration with destruction of the drum membrane and necrosis of the ossicles resulting in chronic purulent otitis media and permanent deafness. Besides this the liability to mastoidetis is greater in measles than in any of the other acute infectious diseases.

As a matter of fact there is middle ear suppuration in about 25% of all cases of measles, and from 24 to 26% of all cases of chronic purulent otitis media in children are caused by this disease.

Scarlet Fever.—Second only to measles in the causation of middle ear suppuration

is scarlet fever.

Every few days I have some patient come to my office and when asked when his ear trouble began states that he had scarlet fever or measles when a child and that the ear had been running more or less ever since. Had such cases been detected early and the proper treatment instituted the majority of these chronic running ears could have been avoided. The percentage of middle ear complications in scarlet fever varies with the epidemic, which, as you know, may be very mild or very severe; where the nose and throat are especially involved the percentage of ear cases has been recorded as high as 50%, but the average for several epidemics is from 10 to 20%.

Scarletina is responsible for 12.6% of all cases of chronic suppurative otitis media in children.

Diphtheria.—While diphtheria of the middle ear is rare it does occur and sometimes leads to mastoiditis. Most of the cases of middle ear suppuration in diphtheria seem to have been due to nasal feeding in tube cases and the applications of various irritants in the endeavor to remove the membrane. This being the case it is safer, though more troublesome, to resort to oesophageal feeding, and none of us now, since we know the true nature of this disease, attempt to use irritant sprays, mops, etc.

Influenza.—It is scarcely necessary for me to remind you that since the general introduction of lagrippe into this country in 1889 that there has been a large increase in the number of cases of mastoidetis. Such being the case it is of the greatest necessity in all cases of this affection to make an early diagnosis and institute proper treatment of the middle ear involvement in order to prevent this complication, and the further spread of the infection to the intracranial structures or to the jugular bulb.

In influenza, measles, scarlet fever, and diphtheria I think it is of the greatest importance to use a cleansing spray in the nose as it has been demonstrated in hospital practice that this simple measure greatly lessens the number of cases of middle ear suppuration.

Pneumonia.—The frequency of the pneumococcus in pure culture in the pus of acute purulent otitis media and mastoidetis is sufficient reason for us to make frequent ear examinations in pneumonia, for patients with this affection are so depressed both mentally and physically that they do not complain of the ear until irreparable damage has been done, or they may go on to mastoid or intracranial involvement before the condition is detected.

In closing I will mention that acute purulent otitis media not infrequently follows acute tonsilletis.

Conclusion.—I do not wish to be understood as advocating that an aurist be called in every case of the diseases which I have enumerated for if the general practitioner will familiarize himself with the technic of ear examinations as advised in the beginning of this paper he will be able to recognize middle ear conditions when present and thus lessen the percentage of permanent damage.

I would again especially remind you of the great frequency of middle ear suppuration in measles and scarlet fever, coryza and influenza, and its great proneness to become chronic, therefore early diagnosis and treatment is of paramount importance.

I would say that this is the age of preventive medicine. Here we have one of our most promising fields and if the general practitioners will recognize and institute early and proper treatment the number of cases of deafness will be infinitely lessened.

64 Granby St.

Demoralizing Influence of Syphilis and Gonorrhoea in the Present State of Civilization of the Negro Race.

By P. L. Bellenger, Waterproof, Louisiana.

In compliance with your request I shall depart just a little from the regular routine of medicine and attempt to give a resume of conditions existing here, with special reference to the negro race and his utter disregard to all moral laws with its consequent degeneration from venereal disease principally "Syphilis and Gonorrhoea."

It is not my intention at this time to enter into the pathology or treatment of these diseases, but if possible to demonstrate what a terrible factor they are in the demoralization of the race, and knowing their far-reaching effects, it is a plain proposition that the degeneration from a purely physical standpoint, and you may say their eventual extermination is not only to be classed among the possibilities but as a prominent and forcible probability.

It has been my experience to note the wonderful decrease in the birth-rate of these people within the past few years, and the alarming increase in venereal disease.

I have had large planters, who employ hundreds of negroes, to inquire the reason there were so few children born on their property, and why so many of the women complained of headache and "pain in the bottom of the stomach." An examination in these cases will reveal in one a history of syphilis, and in the other an extended gonorrhoea involving all the organs of reproduction with adhesions and abundant inflammatory debris with its consequent sterility and menstrual disturbance.

On my own property, with which I am perfectly familiar, there was born from

twenty families in three years only five children, four of which were syphilitic and one with gonorrheal opthalmia, all of which died except the one with sore eyes. There were also on the same place many families in the very prime of life with no children and no intelligent history of conception, sterility resulting, I presume, from an extended gonorrhea, as I had previously treated the husbands of these barren women for gonorrhoeal urithritis. Syphilis left to the ravages of its own free will in time would sap the vitality of a giant and sow the seeds of destruction among its people, descending from generation to generation, till at last they will cease to reproduce and gradually disappear, aided as it is by gonorrhoea and its many complications, which render conception almost impossible by wrecking the generative organs and making a helpless, suffering, barren creature of what should be a healthy mother, or causing to be brought into the world many innocent children who are deprived of the great and glorious privilege of seeing the beauties of nature, and are thrust upon the public institutions for support and education, victims of a vicious parentage.

It has been my sad duty to treat both acquired syphilis and gonorrhoea in children as young as six years, and from that up to ninety, thus giving an idea of its wide dissemination among these people, and many times I have assisted in the delivery of children born of syphilitic parents, and have seen them wither and die before they leave the mother's breast, or fight the battle of life for a few years a care to others and a misery to themselves, finally filling an untimely grave, victims of a terrible heritage.

The contamination of our youth, and the dangers to our little ones from infected nurses is another and vital reason for some immediate and decisive action. Many times I have advised the dismission of nurses and servants whom I knew to be syphilitic, for fear of infecting innocent white children they were employed to nurse and care for. The far-reaching evils of these diseases are so manifestly plain that but a single thought is required to realize the enormity of the problem that confronts us and stir the medical world from stem to stern in search of a means by which disease, death and extermination may be transformed into health, life and prosperity.

It is not my purpose in presenting this paper to your readers to prejudice the minds of any one against these people, but to bring out facts that are of much importance to us as preservers of the public health and guardians of the generations to come. In suggesting the remedy for this terrible evil, and one that will be productive of much good, is beyond my power. Education may in time bring about beneficial changes, but it must be on different lines from the present, for there can be but small chance of elevation of a people whose physical and moral beings are so blighted, for morality is the corner stone of government, prosperity, and the upbuilding of both the mental and physical man.

Granting that for all times to come they shall be "a hewer of wood and a drawer of water" a sound body only renders them more efficient, and is the stepping stone for a higher place in the affairs of men. In conclusion I can only hope that the near future will bring about some means by which these people can be lifted from their beds of iniquity, and physical degeneracy, and placed upon a plain of higher morals, whereby they can see the terrible danger that threatens their existence and menaces the entire populace.

Vaccination and Infant Mortality.

Mackenzie (Brit. Med. Jour.) mentions the popular impression that vaccination introduces into the infants many diseases which impair vitality, and also that it is contributory to infant mortality, and states that he was led to investigate the subject because a specialist in children's diseases had mentioned in an article sent to him vaccination as a cause of infant mortality. The writer collected 987 children who were born in the years 1900, 1901, and 1902, in the district where he was medical officer during this time, and resided there. Of these 987, 706 were vaccinated and 281 not vaccinated.

The mortality of those children who had been vaccinated during the first year of life was 8.49 per cent. and of the unvaccinated 16.01 per cent.

Mackenzie found that among the children who were vaccinated death occurred at such an interval following that the vaccination would not be regarded in any way responsible.

The popular impression, even among the medical profession, that vaccination acting concurrently with another disease imparts a shock to the infant and accelerates its death is shown to be erroneous, with possibly the exceptions of zymotic enteritis and tuberculosis. Measles, scarlatina, pertussis, influenza, and syphilis all seemed to be favorably affected by the vaccination.

He says that latent eczema and impetigo may be excited by vaccination, and cites cases which seem to prove his statement.

In his opinion true insusceptibility to vaccination is extremely rare, though there may be a temporary insusceptibility due to

ill health, particularly anemia, and that when this is removed the susceptibility returns.

The Treatment of Serous Effusions.

Barr, in The British Med. Jour., mentions what is evidently a new method of treating serous effusions. The idea occurred to him to inject 1 fluid dram of adrenalin chlorid solution into the pleural sac, in a case of abdominal cancer extending to the pleura, after the aspiration of a large quantity of bloody serum, the object of the injection being to lessen the secretion. There was no further secretion, consequently no further tapping and the patient spent the remainder of her life in perfect comfort so far as her chest was concerned.

This treatment was extended to cases of ascites due to hepatic cirrhosis in which marked results were not expected. However, the rapidity of secretion was diminished and no ill effects were noted, the quantity of adrenalin solution used varying from 2 to 3 fluid drams.

In a case of pericarditis with effusion in a lad, 19 fluid ounces of serum was withdrawn from the pericardium, but a reaccumulation rapidly followed. The patient's condition becoming critical the paracentesis was repeated, 20 ounces of fluid being withdrawn with immediate improvement in the quality of the pulse. Forty minims of solution adrenalin chlorid, 1-1000, was injected into the pericardium. The pulse at the wrist disappeared, the boy became of an ashy leaden hue and had an anxious expression. Immediately nitroglycerin and atropin were administered and the boy quickly rallied. No further tapping was required. The same patient had a subsequent attack of left pleurisy with effusion. Ten fluid ounces of serum was withdrawn from the chest and one fluid dram of adrenalin chlorid solution was injected. There was no reaccumulation.

In a case of tuberculous peritonitis and ascites 200 fluid ounces of serum was withdrawn and two fluid drams of solution adrenalin chlorid introduced into the peritoneal cavity, with four pints of asceptic air (to prevent adhesions). Thirteen days later 237 fluid ounces of serum was withdrawn and two fluid drams of adrenalin chlorid solution and two pints of air were injected. Upon a third occasion, 11 days later, 196 fluid ounces of serum was obtained by tapping, and three fluid drams of adrenalin chlorid solution and four pints of sterile air were injected No reaccumulation of fluid occurred.

A female child of 7 years was the next patient. One pint of fluid was withdrawn from her pleural cavity and one fluid dram of adrenalin chlorid solution and half a pint of sterile air were injected. Though it was highly probable that the pleurisy was tuberculous there was no reaccumulation of fluid and the patient recovered.

Curability of Tabes.

Duhot (La Syphilis) reports two cases of cure in tabes by intense mercurial treatment in the early stages. The method employed consisted of injections of 10 centigrammes of calomel. He does not like the term "parasyphilis" and says that the curability of tabes shows that this affection is not only syphilitic in origin, but also in nature. The author mentions that if mercury cannot regenerate nerve-fibres it can act on the sclerosis which presses on the fibres. The recent work of Nagerth shows that tabes is characterized anatomically by an inflammatory lesion, which attacks a certain number of the sensory or motor roots at their exit from the subarachnoid space, and which is due to syphilitic meningitis. This may be subacute or chronic, and is identical with the changes produced by syphilis in the nervous centres. Tabes is thus due to syphilitic meningitis, but is only recognized clinically when the lesions become severe. The initial meningitis is confirmed by lymphocytosis of the cerebro-spinal fluid, which is constant. The meningitis extends to the nerve-roots, and causes interstitial transverse neuritis. Hence the absence of histological changes, hitherto described as characteristic of syphilis, does not negative the syphilitic origin of a lesion. He say that the curability of tabes has been proved by Erb, Leredele, and others, and gives the details of his own two cases, one of which was a veritable cure and the other an arrest of the disease, but leaving some degenerations. In the first case signs of tabes developed as early as eight months after the chancre. Injections of 10 centigrammes of calomel were given, with iodide and static electricity. In all, fifty-three injections were given, representing more than 5 grammes of calomel.

Bronchiline.

There have been but few specifics discovered for any disease that flesh is heir to. No one in this day expects such a thing. It is equally true that a few standard remedies furnish nearly all that we have that can be safely used. Bronchiline is a compound elegantly put up, carefully harmonized and one of the few tried and well known remedies for all ailments of the bronchial tract or of the lungs. The formula is furnished with each bottle. Full particulars upon application. Peter-Neat-Richardson Co., Louisville, Ky.

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ENFORCING THE MEDICAL LAWS.

With the passing of the twentieth year since the enactment of the clause in the Medical Practice Act of North Carolina making it a misdemeanor to practice medicine or surgery or any of the branches thereof for fee or reward, there has been noticeable of late a more pronounced tendency on the part of judges, solicitors, and juries too, to demand a more rigid enforcement of the statutes. The increased interest in this important matter has been in part due to the general advance of our people along intellectual and sociologic lines, but a not inconsiderable degree of the interest aroused has been due to the salutary influences of the physicians composing the County Medical Societies. That a certain influence for the conserving and enforcing of the valuable legislation which the profession has acquired through a long period of time, extending back more than fifty-six years, should be exerted by each member of every local society goes without saying. Certainly it is eminently proper that the membership in each county be ever on the alert to stand firmly for all that tends to benefit the public, improve the social conditions surrounding them, and promote the best interests of not only the profession, but the elevation of the community, sentiment along hygienic, sanitary, and other lines of righteous living. It is a pleasure to recognize the growing interest in our State, and throughout the South in general, on all such questions, and it behooves every practicing physician that he be not a laggard in this profession in the matter of performing his full duty to society and the State. It is possible that some medical men at times fail to realize fully the grave responsibilities resting upon us in the matter of educating our patients and giving stimulus to a strong, vigorous, healthy sentiment which shows itself in endeavors to promote and attain to a higher scale of living and action by our patrons of the laity.

That the general influence of the doctor in the ordinary affairs of the community is more potent now than a generation back, is an unquestioned fact, the recognition of which entails a responsibility which all practitioners do not struggle to live up to. In the larger and more populous sections the performance of the civic professional duties of the physician are accomplished with more ease and with a less degree of friction than in the remoter districts.

In a county where almost every doctor has a State license obtained by an examination before the State Board, it is a matter of very little bother, as a rule, to see the medical laws enforced, but in a county where the licensed doctors are in the decided minority the vigorous assertion of a disposition to stand for the elevation of the profession carries with it a task of no mean proportions.

But while the difficulties are of a character which may become annoying for a time, yet there are absolutely no obstacles which perseverance, the exercise of patience and good sense will not in the end overcome and reward the physician who takes a bold firm stand for the right, and for the uplifting of the professional standards in his county. As these lines are penned the potent influence of a single man of the first grade which has been exerted at different times in a number of the counties of this State, for the advanced interests of his community, and incidentally his profession, too, comes to mind, and we have yet to hear of a good man's failure to succeed in helping his people and his profession.

The people and the medical profession of the extreme western county of Cherokee in North Carolina have lately been the recipients of some kindly attentions from the Superior Court of that district, which, when recently held in Murphy, resulted in the conviction of several illegal practitioners of medicine, some of them men who had attempted to practice medicine for several years past, and one or two we are advised who had even acquired a competency by their illegal practice of medicine. When sentence was about to be passed his honor, Judge Neil, enquired carefully into the personal status of the several offenders, and after due deliberation waived the suggestions of the defendant counsel for a moderate fine, and sentenced the so-called "doctors of medicine" to terms of service on the county roads of a nearby county. However, as a salve for the rigorous judgment ordered, the clerk was instructed not to issue capiases for the enforcement of the road service unless complaint should be made at his office of the farther attempts to practice on the part of the several or individual defendants. All honor to the judge! Congratulations to the handful of legal practitioners in Cherokee county who sought to secure the enforcement of laws most helpful and beneficial to the people! With their continued enforcement it can be but a short while until the county will be amply supplied with a higher grade of physicians, and the people receive a more capable and intelligent medical and surgical service.

THE RETURN TO MORE RADICAL METHODS IN GYNECOLOGY.

In the years since McDowell's first ovariotomy ranked gynecology as a surgical entity, no phase of medical thought has been subjected to such extreme variances of opinion, or has passed through so many epochs entirely antagonistic one to the other. With the interest excited alike in the medical profession and among the public at large, by the earlier successful gynecological procedures, pelvic operations become vaunted curealls for every disease to which woman is a victim.

Replacing that attitude which caused threats of hanging to be directed against a surgeon, should his operation, an ovariotomy, be followed by fatal results, there arose an almost hysterical desire to exploit the new gynecological operations as a universal panacea.

For years, both in this country and in Europe, pelvic surgery became widespread and its tendency more and more radical until a point was reached where grave operations were performed for the most farfetched indications. Menstrual disturbances, subinvolution of the uterus, or even conditions depending purely, as we now know, upon systemic disease were recognized as proper reasons for the removal of part or even all of the internal genitalia. Finally there was developed by Batty, the so-called normal ovariotomy, the purpose of which was not to relieve any ovarian disease, but was performed for the cure of neurasthenia and nervous irritability. This extreme point reached, a very rapid and decided reaction set in. "Dudley," "Penrose," "Polk," and a host of others, developed conservative operations and strongly deprecated the removal of an organ, unless it presented grave organic disease.

Purely symptomatic operations were strongly condemned. The small cirrhotic and cystic ovary was emptied of its cysts, the tense tunica propia freed and the ovary replaced. The hydrosalpinx was tapped, the fimbriated ends of the tubes stitched open. When double ovariotomy was imperatively indicated by reason of a purulent inflammation, the uterus, bereft of its appendages, and of its very reason for existence, was left a landmark for conservative surgery.

This period of ultra conservatism served a most valuable purpose; it re-established public confidence in Gynecology—though some years were required to allay women's fears of being subjected to grave and mutilating operations for trivial causes. Then, too, the sudden and almost universal opposition to radical methods demonstrated to the profession how far astray it had been led in its eagerness to apply a new agent in the battle against disease.

Conservative surgery, however, soon began to be carried beyond the bounds of rationalism. Patients from whom only portions of grossly diseased tissues were removed, began to return for secondary operations. The errors of technique which were not apparent at the time of operation, were beginning to become known. For example, the very high hysterectomy, in which practically only the fundus uteri was removed, leaving all of the cervix and a large portion of the corpus. Case after case, in which this operation was done, are today being reported with fibroma and carcinoma developing in the stump. To leave a mass of uterine tissue after the excision of both ovaries and tubes, has been found to predispose that tissue to more or less dangerous varieties of degeneration.

Noble's recent statistics of the degenerations and complications of fibroid tumors of the uterus, conclusively prove the absolute fallacy of the views so strongly urged by several advocates of conservatism, that a uterine fibroma is a benign growth, probably to be absorbed during the menopause and that unless growing very rapidly or producing marked symptom complex it should not be disturbed.

While the days of indiscriminate removal of the female reproductive organs for disease, the true cause of which is far removed from these organs, is happily gone forever, it remains for the present generation of Gynecologists to thoroughly sift the evidence, and to avoid errors in the opposite direction. To fail to remove all of a diseased tissue whenever possible is as great a surgical mistake as to remove healthy organs.

The tendency of today is to adopt that middle course which conserves all healthy tissue where possible, but unhesitatingly and completely removes any organ showing evidences of disease, whether that disease be quiescent or active.

There has been so much written in the secular press as well as the medical journals, lately, upon the subject of "Fresh Air" in the treatment of tuberculosis pulmonalis, that many are constrained to believe it a perfectly new idea. Especially is this true of the laity, who read with avidity everything that is written on "Fresh Air." I suppose they often wonder what the Doctors have been doing all these years in permitting so many patients with tuberculosis to die, when it is so easy to get well on simply "Fresh Air."

The "Fresh Air" idea is probably the oldest idea extant for the treatment of tuberculosis pulmonalis. From the days of Hyppocrates to the present time, there have

been few physicians who have failed to caution their patients on the necessity of "Fresh Air."

From time immemorial, it has been the custom to send these patients to the mountains, country or seaside, where "Fresh Air" could be had in abundance. Switzerland and Nice on the Mediterranean for Europe; Colorado, California, North Carolina and Florida for America represents, and has for ages, the typical ideas of the profession on this subject, the physician sending the patient to the place most suitable for that particular individual.

The "Fresh Air" idea is being unintentionally worked by some physicians, and very many of the laity, into a harmful fad. There is nothing more certainly demonstrated than that "Air," any kind of "Air" for that matter, is not a specific for tuberculosis in any sense to the exclusion of other necessities. That *fresh, pure air is one of the essentials* in treating tuberculosis, no one will deny, but that it falls far short of a specific or that it will by itself have much effect in preventing or arresting an attack of tuberculosis when once it has obtained a foot hold in the lungs. In proof of this, I would call attention to the fact that no one could be in the fresh, pure air more nor could a purer air be found than that enjoyed by the farmers and country people of the Southern States, where, for most all of the year round, they are out of the house, in the fields and woods from early morn until darkness drives them in. Many of the houses in this section are built in such a manner that it would be impossible to confine any kind of air in them as the wind blows through the cracks everywhere and doors and windows are seldom shut, yet these people are not free from tuberculosis, in spite of their lives being spent absolutely in the "Fresh Air."

The laity read about the "Fresh Air" treatment and the different sanitariums and imagine that air is all that is necessary. They do not know that these patients, or at least a great majority of them, are forced into absolute rest, and that their diet and method of being fed is the constant care of a competent physician, that exercise is prescribed, when allowed by the Doctor, that their temperature, coughs, colds and all other complications, as well as their comfort, are looked after by skilled hands, which has as much to do with bringing such cases to a successful issue as the out door life and "Fresh Air."

Where the injury is done in these cases is that the patient or sufferer with tuberculosis has his mind so stocked with the fad of "Fresh Air," he is constrained to cut out or eliminate all agents or means except plenty of fresh air, to which he frequently adds *exercise*. How often it is that when the patient finally presents himself to the physician, frequently after he has been frightened by a hemorrhage, pneumonic attack, fever or gradual and rapid loss of weight, we hear the same stereotyped phrase, "I have no faith in medicine and want just as little of it as possible," or again, "If the climate and fresh air do not cure me, I have no faith in anything else." Many, I might say the great majority, of the fatal cases, we find on inquiry have been losing valuable time, trusting in fresh air, without any one who is competent to direct them in their search for health; the heart is allowed to wear itself out without support, exercise is rushed in the vain hope of building up strength and improving the digestion. Fasting is practiced in many cases that the stomach may regain its tone or for fear of an attack of indigestion or diarrhea. "Fresh Air" in the treatment of tuberculosis is a necessity, but should not the physician repress the idea that it is the *only thing* in the treatment of this condition?

The physician should know the importance of the combination of "Fresh Air" with, we might say, the other three essentials—rest, diet and medical supervision, that will aid and have for its chief aim the forcing of nutrition. While no one will dispute with me in regard to rest and diet, there seem to be many physicians, even, who seem to think that medical skill and the physician are of very little use in handling tuberculosis. I want to say that I believe that the importance of the physician in the early and light cases to be equal to that of diet and rest, because the patient will certainly not get all out of either diet, rest or air without his assistance and is thereby loser.

Dr. Hugh R. Thompson, of Reidsville, North Carolina, has accepted the position of assistant resident physician at the Broadoaks Sanitarium, Morganton, N. C., and has entered upon his duties. Dr. Taylor will continue to reside in the sanitarium with his family and give close personal attention to the needs of all his patients. The engagement of an assistant was found desirable on account of the enlargement of the sanitarium and Dr. Taylor's desire to pay especial attention to the curative treatment of drug habits and the development along other lines, which will be announced when his plans are matured.

THE POWER OF THE BOARD OF EXAMINERS TO RESCIND MEDICAL LICENSE.

Section 3133 of the old Code of North Carolina contains a portion of the Medical Laws enacted in 1859 as a part of the same

statute creating and prescribing the duties of the State Board of Medical Examiners and reads as follows:

"Said Board shall have the power to rescind any license granted by them when, upon satisfactory proof, it shall appear that any physician thus licensed has been guilty of grossly immoral conduct."

When we clamor, as we do so often and very properly so, for a more rigid enforcement of the medical statutes of the State at the hands of solicitors, juries and judges, it is well for us to be scrupulously honest with ourselves and ask of the profession if every possible safeguard is thrown around the public by the proper exercise of the power to rescind a license issued by the State Board of Medical Examiners? The recent sad occurrence in the city of Greensboro, N. C., where a legally licensed and registered physician was upon the sworn testimony of three of his confreres directly charged with being the cause of his wife's death, and his consequent incarceration in jail to await trial upon the charge of murder, has aroused both the attention of the profession and the laity to the very vital fact that a physician may be at one time of his life a competent individual to be entrusted with the care of sick people and he may by virtue of dissipated habits or drug addictions be transformed into an individual most dangerous to society.

That a physician who regularly and habitually consumes large quantities of any powerful narcotic is in any degree exempt from the same results which follow their habitual use by one of the laity is an assertion too absurd upon its very face to be given credence by any one. Then this being true, it is not very apparent to those of us intimately acquainted with the medical profession, that there are members of the profession whose habits as regards the excessive use of narcotics renders them possibly dangerous to the patients whose lives are entrusted to their care. Of course we all realize that when a man in any vocation of life becomes notoriously addicted to any narcotic habit, that the public knowledge of the fact as a rule detracts from his prestige as a successful man, be he physician, lawyer or what; yet it is a matter of common knowledge that a practicing physician necessarily must sink very low indeed in the scale of human degradation ere all demands cease to be made upon him for professional service.

In North Carolina, and in the other Southern States as well, we do not believe there are as large a proportion of physicians addicted to narcotic habits as are said to be found in certain other sections of the country, and we believe the statistics given out along this line by an eminent eastern specialist in drug addictions greatly overestimates the proportion in the profession of the whole country, yet we are of the opinion that there are in every State of the South a limited number of physicians whose State licenses should be taken from them in the interest of the very same people for whose welfare the profession are compelled to obtain license—the unprotected, defenceless people of the country, of the cities and of the towns, who do not, who have not the capacity to discriminate between the capable competent and the ignorant and vicious, possibly dangerous practitioner. We suggest that it is the duty of the local profession wherever there exists an unfortunate physician whose intemperate or narcotic habits are such as endanger the lives of the patients entrusted to his care, to see that the State Board of Medical Examiners are placed in full possession of the facts of such dangerous addictions, to the end that the Board may do its full duty disagreeable though it may be to take from a man a privilege he has enjoyed for years, and for which he struggled and studied hard to attain. But the best interests of the people and the profession (and it may be asserted as a general proposition the two interests are always identical) sternly demand that cognizance should officially be taken of such cases.

THE WASHINGTON CITY (N. C.) HOSPITAL: DR. DAVID T. TAYLOE'S PRIVATE HOSPITAL.

This notable addition to the rapidly growing number of North Carolina hospitals which are doing the major percentage of surgical work, which only a few years ago sought relief in the larger cities North, is now open to the public and is being well patronized.

The formal dedication of the institution was held last month under most favorable auspices in Washington, N. C., and marks an epoch in the development of affairs medical and surgical of the eastern section of the State.

The hospital was the inception of Dr. David T. Tayloe, who has realized for some years the growing needs of the community for a first-class medical and surgical institution. In its construction models and building plans of only first-class hospitals were consulted and the attained result is one which will be viewed with a commendable pride by all connected with or interested in its development. It is charmingly situated in one of the most healthful locations in the growing city of Washington, N. C., and is a well-built three-story construction with accommodations for about twenty ward patients and for an equal number of private

cases. The usual administration rooms are in ample evidence and admirably arranged as to every detail for sanitation, convenience and comfort of patients and attendants alike. The private rooms are models of refined elegance in modern hospital equipment and the furnishing and arranging of the wards are complete in their appointments also.

In short, nothing seems to have been omitted which would make the hospital fully the equal of the best private institutions of the country.

The dedicatory services were appropriate and attended by the leading people of Washington and vicinity, whose interest in the success of Doctor Tayloe's enterprise has been most substantially attested by the unusually large number of the wards and private rooms which have been wholly furnished at individual expense by admiring friends and lovers of suffering humanity.

Dr. Tayloe's prestige in the profession of the State, his reputation as one of North Carolina's ablest physicians and most skillful surgeons, his genial manners, his notable ability as a leader of men and moulder of sentiment, his admirable executive capacity, his known devotion to its best interests and concern for his profession, his conscientious and tender regard for the humblest of his patients, coupled with the strong men and women of his community standing willing sponsors for its success, render the future of the institution and its noteworthy influence for good inevitable.

Associated with Dr. David T. Tayloe in the management of the hospital are two active and accomplished young medical gentlemen. One of them, his brother, Dr. Joshua Tayloe, won distinguished credit as the State's small pox inspector some years ago, and the other, Dr. Ed. M. Brown, a leading man for some years past in medical circles of Washington and Beaufort county. Combined the three make a staff which insures the best professional service possible to the patients treated there.

We extend our sincere congratulations to the gentlemen in charge of the new institution, to the fortunate citizens of Washington, and chronicle with pleasure another added illustration of the growing tendency in the Southland to develop and build up its own Medical and Surgical institutions.

PROTEID DIET.

The daily amount of nitrogenous food required by man has been subject to a vast amount of investigation. Voit, whose figures have received general acceptance, considers proteid 130 grms, carbohydrates 550 grms, fats 40 grams, a total of 3160 calories, the proper amount. Atwater and Gautier arrive at approximately the same results. Chittenden has recently raised the question as to whether these diets only represent the food actually consumed by individuals of different nationalities and if they are not greatly in excess of man's actual physiologic needs. As long ago as 1887, Hirshfield experimenting on himself found he could maintain N equilibrium on from 35 to 45 grms proteid (5.0 to 7.5 grms N) for from 10 to 15 days, his total diet amounting to from 3750 to 3916 calories per diem.

It is evident that the smallest amount of food that will serve to keep the body in the highest state of efficiency is physiologically the most economical, the greatest amount of force being obtained from the smallest amount of fuel with the least wear and tear upon the physiologic processes, and hence, is best adapted to the needs of the organism. As carbohydrates and fats are ultimately decomposed into C. O. & H. O. substances which are nontoxic and easily eliminated, producing little or no strain on the excretive organs, it is evident that perfect health and maximum work can be maintained on the minimum amount of proteid, the organs concerned in digestion and elimination will have minimum amount of work to perform. The products of proteid metabolism are a continual menace to the organism, being a direct cause of nearly all the diseased conditions produced by autointoxication, either by their ultimate products or when the chemic processes are imperfect, the intermediate products of proteid metabolism.

The question arises is there not, to use an engineering term, a coefficient of safety required and is there not a certain excess of proteid over actual needs necessary, also is not the evidence that man has appetite for a quantity of proteid food in excess of his actual needs, prove that it is the quantity best adapted for his needs. Man lives to a certain extent in an artificial manner and the higher his civilization the greater the artificialism. As civilization advances so does the art of cooking or the art of making foods more pleasant to the palate and less digestible.

Primitive man lived upon raw vegetables and possibly shellfish, and as a matter of fact none of the apes eat flesh though they can be trained to eat cooked meat.

The esteem of cooking as an art may be taken as the gauge of the standard of civilization of a nation. Modern life is largely one of reduced physical exercise and increased mental work; we ride where our forefathers walked or rode horseback, we are whirled to our destination in express trains in a very few hours where our progenitors journeyed days in stage coaches, during which they had fresh air and mental rest, at the same time the amount of pro-

teids ingested was less than now, the practice of having pudding before meat, the rule in the early part of the last century prevented a large meal of meats. The failure in the present day of proper insalivation of food produces imperfect digestion, the 'quick lunch counter' is the etiologic factor in dyspepsia. In support of the doctrine that we consume too much proteid Chittenden has shown by experiments carried out over several months on persons performing active physical, mental and physical and mental work combined, that it was possible to maintain them in N equilibrium on about 7.0 grms of N per diem or about one-half the amount prescribed by Voit. He himself retained his N. equilibrium on 5.6 grms N per diem. He considers that 0.198 to 0.134 grms N per Kilogramme of body weight is sufficient for any one performing severe mental and physical work. There can be no doubt that physiologic economy should be practiced in order to maintain health and that attention to the proper insalivation of the food combined with the reduction of the quantity of the proteids, carbohydrates and fats to the minimum consistent with metabolic equilibrium will reduce the work of the organs of digestion and secretion which are so often the cause of pathologic conditions due to insufficiency from over work.

A MEMPHIS PHYSICIAN HONORED.

Dr. Herbert Jones, president of the Board of Health of Memphis, was sometime ago presented with a purse of $10,000 subscribed by a large number of citizens, in appreciation of his successful efforts in maintaining a prohibitive quarantine during the recent yellow fever epidemic. It was generally understood that Dr. Jones was compelled to forego a large private practice by the exacting duties of his office.

INDIGENT AND NON-INDIGENT INSANE OF NORTH CAROLINA.

The recent action of the Governor and the council of State requiring that the State Hospitals care for all the indigent insane has been brought about by the increasing demands made upon the State by a large number of cases which are unable to pay for treatment in a private sanitarium, and who have been kept in jails for some time waiting until the State Hospitals could provide accommodation for them.

At the last meeting of the Board of Directors of the State Hospital at Morganton Governor Glenn was present and stated that he wished to confer with them in reference to such patients as were able to pay their expenses in private institutions, and to cooperate with them in the enforcement of the law as to this class to the end that they may be removed and replaced with indigent insane persons, particularly those in jail. It is to be understood that under the law insane persons who are without dependants and who have property from which there is an income are entitled to remain in the Hospital upon the payment of their expenses, $150 a year, or less if their incomes are not so much as this, while persons who are wholly indigent are entitled to care free of all charge, and those whose estates will support them in private institutions are not eligible to room in the State Hospital at all.

As a result of a careful scrutiny of the lists of patients it was found that there are very few who could be considered as non-indigent and to those nothing definite was determined.

It was concluded that whereas a part of the public has been induced to believe that there are a great many pay patients in this Hospital to the exclusion of the indigent the number is very small, and it was agreed that to discharge those able to pay $12.50 a month, but not able to pay for the keep in a private Hospital, would be but to exchange one class of jail cases for another, as those discharged must inevitably go to jail or county homes.

Dr. P. L. Murphy, the efficient superintendent of the State Hospital at Morganton, by far the largest and most complete of the State's institutions for the insane, has annually gone before the Legislature and explained to them as to the imperative demand for more accommodations. Always with great respect and confidence in both his professional opinion and business judgment has he been heard and then little has been done as compared with actual additions needed. From year to year these small inadequate appropriations have been made, while the superintendents have gone on with their work as best they could. Patients have been placed two and three in quarters designed for the accommodation of a single case, corridors never intended to be used as sleeping apartments have been so utilized, and other temporary makeshifts resorted to. Despite all this the rapid increase of both the insane and general population has been so great that with the constantly increasing number of the insane who are unable to find accommodations in the State Hospitals and consequently have been doomed to be crowded into county jails the public at last seems to have been awakened to the situation as it has been apparent to the profession for some time. The Governor, after investigating this subject, personally expressed himself as being highly pleased with the excellent management of both Dr. Murphy's and Dr. McKee's Hospitals in every detail of management coming under the scope of investigation and

ordered that the work on the addition to the Raleigh institution be pushed with all possible speed.

In years past the boards of the insane hospitals have used every effort to bring this about, but it was only through the efforts of Governor Glenn that they have been able to accomplish their purpose, and for this not only the members of the board but every citizen, whether directly or indirectly concerned in the matter of caring for the poor insane, should consider themselves deeply indebted to the Governor for taking such an active interest in these poor unfortunate creatures.

The praiseworthy manner and zeal with which the Governor has entered into this investigation cannot, we feel, bring naught but the best results. There is no class of people cared for by the State that deserves better care and protection than these. This the Governor fully realizes and has gone to work accordingly.

When the various cases at present confined in the State Hospitals have been thoroughly investigated from the standpoint of whether they are indigent or not there will no doubt be some that will be obliged to look for care and treatment in a private sanitarium. This law will also debar some who are at present on the waiting list. The enforcement of this law would indeed be considered a hardship provided we did not have at present private sanitariums in this State devoted to the care of these cases. Therefore, we consider it our duty to call your attention to Broadoaks Sanitarium, which has been open for over four years, situated at Morganton, North Carolina. This institution is personally conducted by Dr. Isaac M. Taylor, who for fourteen years was associated with Dr. P. L. Murphy in the State Hospital at Morganton. The site, building, and equipment are the best in every respect and especially selected for the care and treatment of this class of cases.

POST GRADUATE WORK IN THE COUNTY SOCIETY AND ITS RESULTS.

This scheme was begun about two years ago in one of the county societies in Indiana. The first step in carrying out this work was by getting together every physician interested in becoming more familiar with scientific and practical knowledge which would be of advantage to him at the bedside and which would broaden him as a physician. With this end in view a room was rented, a club was formed which, in so far as it was possible, would appeal to and build up the social, scientific, and material spirit and welfare of the profession. The work was divided in such a way that each physician was required to act as a teacher of some special subject and all the others took their places as students. Anatomy and surgery was assigned to one and physiology to another, and so on through the list of subjects, one fundamental and one practical branch to each teacher. The meetings were held twice a week, regular lessons were assigned and each one was expected to be present and give one hours' time to the recitation and study of such subjects as were assigned for that evening. In this way all were enabled not only to exchange individual views as to what one believed, but always have some good medical authority to place them right if it was found to be wrong. This plan proved very desirable and each one soon learned that the teacher of the topic derived far greater benefit from his course, for the reason that he was required to study more to hold his ground, often against the combined opinion of the class. After going along in this way for a time it became apparent that the faculty should be changed from time to time, in order that the teachers should become more proficient in more than one subject. This was found most satisfactory and resulted in a marked improvement in the attainments of every member of the society. The social feature did as much, if not more, for the good of the profession than the scientific work. There is no one in this society that is not on the most friendly terms with every member in the county, and that such a condition exists at present is because they actually desire to be friendly. In addition the regular society meetings have been kept up with increased interest, and although this is not one of the large county societies it is nevertheless one of the best county societies in the State of Indiana.

In connection with this work it did not take long to determine that in consideration of the increase in the cost of living in recent years it was necessary that the fees should be increased one-half. In order that this might be uniform all signed the schedule definitely fixing the price of services for both day and night and had it published. It went into effect without a single ripple and has been strictly maintained. The public seemed to understand the necessity for the change, largely for the reason that it knew that the physicians were making an heroic effort to give the people better service. The results have been that their incomes have been increased by one-half and night work has been reduced to a minimum, giving them the evenings for post graduate work or with their families. After reading over this plan and the results that have been obtained does it not make you feel that our own county medical society is at present far from what you would desire to have it?

It would not be necessary for us to adopt a plan that exactly corresponds to the above, but with this as an incentive it certainly looks as though we might adopt a similar plan which would adopt itself to our societies needs and bring our members more closely together and enable them to do better and more efficient work for the public as a whole, and aid each individual physician in rendering the best possible service to his patients.

Meeting once a month as we do at present with, as a rule, only a few members present and the men assigned to read papers too often not responding it certainly seems as though something along this line ought to be accomplished so that our society will exist not merely in name only. A well regulated and interesting society not only broadens men and makes them more efficient in their work, but makes the whole profession more agreeable and more friendly toward one another. The ideal society of medicine would be one that its members are bound together by ties of brotherly feeling, similar to that attained by some of our best secret orders. If all the county societies were well organized and firmly united throughout the United States and these in turn affiliated with their own State society it would only be a short time when the medical profession would command respect from the public which could in no wise be compared to any existing organization of the present day.

Review of Southern Medical Literature.

The Texas Medical News, November, 1905.

Modern Treatment of Pneumonia.—Dr. W. J. Mathews believes that any suspicion that cold does not have sufficient penetrating power to reach the lungs should be allayed by the evidence coming from the experimental work of Dr. Schlikoff, which shows that a thermometer is introduced into different organs and cavities of the body and ice applied externally, at the same time the local temperature sinks a number of degrees, in most instances while the axillary temperature either remains stationary or falls but slightly. Thus by applying the icebag to the cheek while the thermometer was in the mouth the temperature fell nearly four degrees in one hour. In the hollow of the hand while the ice was applied on its back it fell five degrees in one hour. Cold has been employed in the treatment of acute pneumonia for many years in Germany by the illustrious Niemeyer.

The use of cold compresses to the chest has in many instances shortened the duration of the disease. But for many reasons ice bags are more practical than cold compresses which are used by Niemeyer. In the first place they are dry and do not wet the bed clothing; second, their cold effects are more uniform and decided, because they retain a lower temperature longer; and third, it is not necessary to change them oftener than every two or three hours.

The affected area is to be surrounded with ice contained in rubber bags which are wrapped in thin towels. The number of ice bags to be applied in many cases depends on the degree of fever and on the size of the area involved.

The length of time during which cold is to be applied depends in a great measure on the degree of fever which is present. If the temperature falls to or near the normal point and shows a tendency to remain there the ice may be gradually removed. It is best, however, not to remove all the ice bags, even though the temperature is normal, unless the crisis is at hand without question, because if they are all taken away before the proper time the temperature will rise again and it is brought down with greater difficulty the second than it was the first time.

The most apparent lesion in the lungs is an enormous distention of the pulmonary capillaries with partial or complete stasis of blood in these vessels, exudation of fluid constituents of the blood and proliferation and accumulation of epithelial cells, and diapedesis of red and white blood corpuscles in the alveoli and bronchioles.

Experience teaches that cold not only contracts the small blood vessels, but that it also dissolves an exudate of an infiltration.

For example, the application of ice to a pneumonic area which is wholly devoid of vasicular sound and which has a flat percussion note and bronchial breathing indicating beyond doubt that the process has passed beyond the stage of engorgement and into that of infiltration or exudation will, in the course of twelve or eighteen hours, develop a new group of physical signs, such as crepitation, reappearance of the vesicular murmur, diminution of flatness, etc. This has been observed frequently by Professor Mays, of Chicago, and many other eminent men. Dr. T. J. Mays made a collective investigation of the local influence of cold in the treatment of pneumonia among the members of the medical profession and succeeded in gathering 400 cases. Out of the total number there were seventeen deaths, or a death rate of 4.25 per cent. This is certainly a most favorable showing. *Southern Medicine and Surgery, November, 1905.*

This issue contains a synopsis of the proceedings of the Southern Immigration and

Quarantine Conference, which was a notable assemblage of representative men sounding the keynote of Southern progress. A permanent organization was effected and meetings to be held annually.

Resolutions favor absolute Federal control of maritime quarantine and interstate regulation for Federal control in conjunction with the States. A ringing protest against immigration of undesirable classes.

Destruction of Brain Tissue.—Dr. W. E. Taylor states that there does not seem to be any rule about the amount of brain tissue a patient may loose and still survive. Sometimes we see loses so large that we expect death but are happily disappointed, while at others comparatively small injuries end fatally. To be sure much depends on the location of the injury, but even this is not subject to inflexible rules.

The author cites the famous crowbar case, the cranium of which is at present in the British museum.

To illustrate his statements he relates the following case: A patient brought to the hospital apparently dead with a crushed head. An examination was made of the injury. With a pair of ordinary bone forceps the surgeon tore away the loose tissue and long fragments to see the extent of the damage. He likewise cut away a handful of ragged brain substance paying no attention where it came from. Then with the finger he probed about and found numerous clots, which when removed caused the patient to come to himself so that chloroform was necessary in order to proceed further. His wound was washed out and bandaged up and he was sent to the ward. Within three hours he was up and trying to find his clothing "to go home" and so had to be strapped down for some days to keep him in bed. He was never unconscious after this and had no hallucinations, but was as rational as was his wont. Four months later he was discharged "cured," although doubtless much weaker mentally than before. The damage was principally in the right anterior temporal region.

Texas Medical Journal, November, 1905.

Hemoptysis: Cause and Treatment.—Dr. L. Sexton points out that prominent among other conditions that bring about blood spitting are pulmonary congestion, caused by acute infectious diseases, as yellow fever, pneumonia, etc., pulmonary embolism (infarction), ulceration of larynx or trachea from malignant disease or other cause. Emphysema and hard coughing resulting therefrom is another source of hemorrhage. Mitral disease of the heart, aneurysms, vicarious menstruation in amenorrhea, puerperal hemorrhagica, gouty heart in older persons, and traumatism to the chest wall are among the most common causes of pulmonary hemorrhage. Severe muscular strain and mental excitement may occasionally result in blood spitting. These with other unmentioned causes are enough not to consign every case of broncho pulmonary hemorrhage to the tubercular class, even though 75% of cases have that etiology.

Treatment resolves itself in quieting the tumultuous heart beat, rest in recumbent position, and the cessation of speaking, coughing, or any lung exercise beyond the most simple respiratory acts. Patient should assume the reclining position when and wherever the hemorrhage begins and should remain in this position, not speaking above a whisper, till all evidence of recurrence has passed. Diet should be cold and liquid in character, easily digested. A well-filled ice bag should be placed over the heart and lungs, with a fold of intervening flannel to absorb the moisture. Cold treatment is not suitable for old or very anemic cases. Agreeable saline purging to help deplete the pulmonary oedema is indicated. Dry cupping over the chest is very helpful to the congested lungs. One-fourth gr. of morphine hypodermically repeated often enough to prevent coughing and pain.

In hemorrhage from mitral disease ten drop doses of tr. digitalis or strophanthus should be pushed. In gouty cases iodide of potash and gelsemium should be given as a constitutional measure. A convalescent patient should not inhale the fumes of tobacco or any irritating gases. All bronchial troubles and tendency to cough should be given prompt attention. A sputum examination, if it reveals tubercle bacilli, would call for dry climate and the usual antitubercular treatment. The subsequent treatment of any case depends upon the cause.

Atlanta Journal-Record of Medicine, November, 1905.

Some Cases of Enuresis.—Dr. J. McF. Gaston says that while incontinence of urine is a symptom rather than a disease we must regard the trouble as one demanding attention to correct this abnormal function. The symptoms are rather common in many cases of cystitis, pyelitis, malposition of ureters, stone in bladder, urethritis or neurosis of various kinds. No case of incontinence of urine should be passed over lightly, but should be investigated thoroughly as to cause. A very marked acidity of urine should be investigated likewise. The simple irritation of highly acid urine may give rise to frequent micturition and at times to involuntary urination. The history of many cases will be of great benefit in the explanation of a case of incontinence and should be

carefully sought. A child should be questioned as to the existence of any pain after urination or whether the urine burns. In case of males a child may be suffering from the effects of phinosis, which may be accompanied by retention of urine, and later paralysis of bladder and incontinence of urine. The reflex neurosis in children from the existence of a tight or elongated prepuce are many; also from such as clitoridean adhesions, worms and vulvitis. After reporting some very interesting cases the following conclusions are drawn up:

1. Atropine sulphate is a specific for neurotic enuresis with other things equal.

2. That all the cases required judicious discrimination as to cause.

3. That great caution should be used in the use of atropine.

4. That circumcision is indicated not only in phinosis but elongated loose prepuce to cure enuresis.

5. That hypertrophy of the prostate urinary calculi and hyper-acidity should be treated for relief of enuresis.

6. Many cases may not yield to medical means but may finally be treated surgically.

The Virginia Medical Semi-Monthly, November 10th, 1905.

Osteomyelitis.—Dr. A. R. Shands, after reviewing the history, etiology, symptoms and diagnosis of this disease, gives the following under treatment. The treatment of osteomyelitis should be surgical from the beginning to the end. Internal medication and palliative remedies are utterly unavailing, while prompt and properly executed surgical measures will cut short the progress of the disease in a large per cent. of cases. Delay means disaster. I am firmly convinced that an early and thorough operation is just as strongly indicated in this affection as it is in appendicitis. Here, as in appendicitis, if the diagnosis is made before pus has formed and the medullary canal is opened and good drainage is established the patient will make a rapid recovery. I have never heard of a case of appendicitis being made worse by an early operation, and I mean by an early operation one before pus has formed.

The same holds good in osteomyelitis. I cannot believe it good surgery to wait for sequestrum formation before operating for the simple reason that there is great danger of multiple infection in delaying, to say nothing of increased sepsis in your patient by such procedure.

Just as soon as pus has formed in the medullary cavity it will spread in all directions with great rapidity, producing general sepsis in a degree corresponding to the original germ that caused the disease. It stands to reason then that the early removal of the infected marrow will both diminish the mortality of the disease and at the same time limit the extent of necrosis. Therefore, it is the surest means against pyaemias and reinfection from the primary focus.

Unfortunately it is seldom that the diagnosis is made before suppuration has occurred and worked its way through and involved the periosteum. The operation should be done early and in a manner to remove all diseased bone possible, except in such cases when such procedure would so weaken the shaft as to produce a pathological fracture. In such cases good drainage should be established and sufficient bone should be left, even if it should be diseased, to support the periosteum while the involucrum is forming, and then later a second or even a third operation should be done to remove the sequestrum. If the case has gone on to sequestrum formation it is important to select the proper time for operation; fortunately when this has occurred all acute symptoms of sepsis have subsided. The operation of sequestrotomy consists in the removal of all dead bone, at the same time all diseased and granulation tissue should be curetted away and the wound kept packed, which encourages new bone formation from the involucrum to fill up the cavity.

Virginia Medical Semi-Monthly, November 24th, 1905.

Principles of Surgery, Lecture XII.—Treatment of Inflammation—Antiseptic versus Antiphlogistic Methods—Prophylactic and Curative Treatment—Local and Constitutional Measures Employed with their Indications and Practical Application.—By Dr. Stuart McGuire, Richmond, Va.

New Orleans Medical and Surgical Journal, November, 1905.

Gonorrheal Conjunctivitis in the Adult and the Infant.—By Dr. H. D. Bruns, New Orleans, La.

The Southern Practitioner, November, 1905.

Retro-displacement of the Uterus.—Dr. Robt. Caldwell regards retro-displacement as the most frequent abnormal position of the uterus which is met with in gynecological practice. The forces which retain the uterus in its normal position which is slightly anteverted are (1) the round ligaments which act as guy ropes holding it forward, (2) the utro-sacral ligaments which hold the cervix back in the hollow of the sacrum thereby tilting the fundus forward, (3) intra-abdominal pressure which is exerted upon the posterior aspect of the fundus. A complicated retroversion is not necessarily immovable, but immovable is always complicated. So, then, the movable can be either complicated or uncomplicated, but

very frequently it is uncomplicated.

The most important sequelae of retro-displacement of the uterus are hypertrophic endometritis due to passive congestion produced by twisting of the uterus on its axis, this in turn bringing sterility because the soil is not in a healthy condition to receive the seed; second, abortion due to incarcination of the foetus below the promitory of the sacrum and also prolapse of the ovary, which is frequently the origin of a great many symptoms. The cases of retro-displacement in which we should be guarded as to our prognosis are those which exist in nervous neurasthenic individuals. These cases should be studied very carefully and our mind thoroughly satisfied that the displacement is responsible for the symptoms before any line of treatment is instituted.

The ideal treatment of posterior displacements is mechanical, but unfortunately it is only applicable to the uncomplicated variety and if we are going to accept the opinion that very few of these cases produce symptoms then they require no treatment, so it is only the isolated cases in which we can use this. On the other hand only a small per cent. of cures are reported, and the treatment is quite tedious as well as distasteful to the patient.

Of all the surgical procedures possibly the nearest perfect method and simplest technique has recently been advised by Dr. C. H. Mayo, of Rochester, Minn. He has not published this, therefore the details cannot be given. He makes an ordinary incision in the median line, does whatever is to be done in the pelvis and examines the gall bladder and appendix. Then with a pair of forceps he picks up the round ligament about 1½ inches from the cornu of the uterus, dissects the fat off the fascia until he can get about over the internal abdominal ring and punctures the fascia at this point with a knife; then with curved forceps or ligature carrier passes in at this opening; then passing externally to the rectus muscle and with the distal end of the round ligament held taut with the traction on the forceps by which it was first picked up you can see where the ligament enters the internal abdominal ring. The ligature carrier is passed through this ring and is carried along the portion of the ligament that is taut, just beneath the peritoneum, until the point is reached where it is picked up by the forceps. At this point the peritoneum is punctured and the ligament placed in the grasp of the carrier when the carrier is withdrawn bringing the ligament through the internal abdominal ring up into the puncture in the facia where it is fastened by linen sutures.

The same procedure is carried out with both ligaments The abdominal incision is closed in the usual way.

Southern Clinic, November, 1905.

Myrica Cerifera.—By Dr. J. A. Burnett, Cecil, Ark.

Memphis Medical Monthly, November, 1905.

Acute Suppurative Splenitis—Report and Presentation of Case.—By Dr. M. Goltman, Memphis.

The Medical Recorder, November. 1905.

Some Observations on Treatment of Yellow Fever.—By Dr. Luther Sexton, New Orleans.

Maryland Medical Journal, November, 1905.

The Hygiene and Etiology of Typhoid Fever.—By Dr. M. L. Price, Baltimore.

The American Practitioner and News, November, 1905.

Arterio Sclerosis.—By Dr. M. M. Pearson, Bristol, Tenn.

Nashville Journal of Medicine and Surgery, November, 1905.

The Treatment of Puerperal Eclampsia.—By Dr. J. T. Altruan, Nashville, Tenn.

The Mobile Medical and Surgical Journal, November, 1905.

A Few Words for the Rights of the Prostate.—Dr. Jas. W. Henson explains the indifference as to the demands and rights of the prostatic in the following:

1. Lack of information regarding the results of the disease. There are but few doctors who don't realize that when the catheter is used continuously infection will follow in spite of the utmost care; but there are many who don't know that with residual urine of several ounces present infection will be established sooner or later without the use of a catheter, the bacteria coming possibly by way of the kidneys or from the rectum. There are also many who do not know how early and seriously the bladder and kidneys may be damaged after infection.

2. Many doctors and surgeons, though they know the danger, are, nevertheless, apathetic, because the pathological process is one that progresses step by step, and they are not impressed and aroused as they are by an immediate danger, as, for example, in suppurative mastoiditis.

3. Many are afraid to advise radical operation, believing it is too dangerous to life.

4. Some are not informed as to the relief obtained by radical measures, or else are so imbued with the old time hopelessness regarding prostate hypertrophy that they are skeptical.

The mortality from a radical operation is high, 15 per cent. or more in weakened old men, who have had symptoms of obstruc-

tion for a long time and consequently have secondary pathological changes present. If such cases recover from the operation they are often not relieved of the symptoms on account of the structural changes that have occurred in the bladder. But when cases are subjected to operation early, before infection has wrought serious changes and while the men are in good general condition, note the results of Dr. Eugene Fuller, of New York, who has reported over 300 cases states that he could operate with a risk of not over, and perhaps less, than 5 per cent. Some report less than 5 per cent.

Therefore, every man with symptoms of prostatic hypertrophy if an examination proves this condition to be accompanied by residual urine of five or even four ounces should be in positive terms advised to submit to a radical operation whether infection be present or not, unless such an operation be contraindicated by an enfeebled general condition from the results of obstruction and infection or some other cause. First, because infection will be established whether the catheter is used or not, and the use of it will only hasten infection. Second, because the surgeon can not keep daily track of the progressive pathological changes and be able to say just when that point in these changes is reached, beyond which the bladder will not recover its function if given a chance. Third, because in cases taken early a radical operation which thoroughly and successfully removes the obstruction results in cure. Fourth, because in the early operation the mortality in good hands is low.

After discussing the various ways of operating and use of the catheter, etc., he concludes the paper by calling attention to those poor fellows who are too feeble or too much diseased from infection to stand any radical operation. Drainage by superpubic or perineal cystotomy affords much relief and some cases are so much improved by this treatment as to become candidates later for a radical operation.

Gaillard's Southern Medicine, November, 1905.

Typhoid Fever Limited.—Dr. A. G. Brown says that it is well known that the typhoid bacillus are most frequently found in the fecal discharge and urine. The sweat, expired air and expectoration accredited by some isolated observers with the presence can hardly be given much importance as bacilli carrying media from a typhoid patient. The bacillus has great resisting powers and remarkable vitality. Temperature of 104 degrees F. is required to kill it, but it withstands freezing temperatures for a long time. Sunlight kills it. For months and years it may lie dormant in dust, clothing and soil. In water, milk and food it will survive for days and months. It is acceded that the digestive tract is the channel of entrance in a vast majority of cases of infection.

Of the carriers of the virus or germs water is preeminent in importance. Drinking water, whether it receives the germ directly from the patient, from privy, wells or cesspool, or by the direct source of the soil infection, has been through long years of observation accorded the distinction of being the most prolific source of typhoid propagation. Many instances of medical literature may be cited to prove that epidemic after epidemic has been due to the infection of drinking water. Milk is also another mode of infection, and this infection may be by dilution with infected water preservation and transportation in vessels washed in such water, or direct infection through hands of milkers, dealers, servants and other persons who come in contact with typhoid patients and dejecta. Among other sources of infection may be mentioned articles of food, such as butter, tea, and coffee, ordinary white and red table wine, vegetables, oysters, and clams. Also it has been shown that flies, after coming in contact with typhoid infected feces, may carry the germs and infect food previously not infected. After discussing the duties of the health board in the various communities and recommending that the public should be taught the dangers of the spread of the disease he concludes by saying that the physician in charge of a patient has the grave responsibility of the prophylaxis of the individual. The nurses must remember the virulence, hardihood and tenacity of the bacillus and accordingly secure themselves against infection, as well as becoming disseminators of the bacilli. Disinfection of the stools should be followed immediately upon being voided and should be handled with scientific scrutiny and care. With like care the urine should be handled, subjecting it promptly to some strong germicide. Nor is the sputum to be neglected, for in it may be lurking the bacilli. This should be disinfected also. The wash and bathing water and remnants of food, as half-used glass of milk, and the bed linen and body linen and any other articles of use in the patients room should receive the same scrupulous antiseptic treatment.

After the termihation of the attack the room furniture and bedstead should be washed down with carbolic acid lysol solution. If iron bed the use of steam is recommended. The bed clothes are disinfected by steam and all valueless articles cremated. In disposing of the typhoid dead leansing the body with antiseptic solutions

and cleansing and covering the buccal, nasal, and anal orifices with absorbant cotton renders the body innocuous.

Preventitive innoculation has been lately introduced. Wright and Netley have inaugurated a similar method to that of vaccination. Its general use has not been such as to have established for it an indisputable position in professional esteem.

Book Notices.

A Text-Book on Modern Materia Medica and Therapeutics. By A. A. Stevens, A. M., M. D., Lecturer on Physical Diagnosis, University of Pennsylvania; Professor of Pathology, Woman's Medical College of Philadelphia. Fourth Edition, Revised. Octavo of 670 pages. Philadelphia and London: W. B. Saunders & Company, 1905. Cloth, $3.50 net.

The new fourth edition of Dr. Stevens' excellent work on practical therapeutics appears at a most opportune time, close upon the issuance of the Eighth Decennial Revision of the Pharmacopeia to which it has been adapted. Dr. Stevens, by his extensive teaching experience, has acquired a clear, concise diction that adds greatly to his work's pre-eminence. New articles have been added on Scopolamin, Ethyl Chlorid, Theocin, Veronal, and Radium, besides much new matter to the section on Radiotherapy. The numerous changes in name or strength of various drugs and preparations, as called for by the new Pharmacopeia, have also been made. In fact, it is somewhat difficult to speak of Dr. Stevens' Therapeutics without resorting to the frequent use of superlatives, for of all the good works on this most important of subjects, this book before us is undoubtedly the very best.

Gall-Stones and Their Surgical Treatment. By B. G. A. Moynihan, M. S. (London), F. R. C. S., Senior Assistant Surgeon to Leeds General Infirmary, Leeds, England. Second edition, revised and enlarged. Octavo of 458 pages, beautifully illustrated. Philadelphia and London: W. B. Saunders & Company, 1905. Cloth, $5.00 net; Half Morocco, $6.00 net.

The first edition of Mr. Moynihan's work on gall-stones was completely exhausted in eight months. Mr. Moynihan, by his masterly presentation of operative technic and clear, logical discussion of indications and contraindications, has won an enviable place in contemporary abdominal surgery. In this edition, increased in size by some seventy pages, many additional case records have been incorporated and a number of new illustrations added. We note also the addition of a very valuable chapter—Congenital Abnormalities of the Gall-Bladder and Bile-Ducts. It is evident that the whole text has undergone a careful revision and all recent work along the line of gall-stone surgery included. Mr. Moynihan's book still holds first place in its field. The illustrations are very beautiful, especially the nine colored plates.

Nervous and Mental Diseases. By Archibald Church, M. D., Professor of Nervous and Mental Diseases and Medical Jurisprudence in Northwestern University Medical School, Chicago; and Frederick Peterson, M. D., President of the State Commission in Lunacy, New York; Clinical Professor of Neurology and Psychiatry, Columbia University. Fifth edition, revised and enlarged. Octavo volume of 937 pages, with 341 illustrations. Philadelphia and London: W. B. Saunders & Company, 1905. Cloth, $5.00 net; Half Morocco, $6.00 net.

It is not at all surprising to us that a fifth edition of Church and Peterson's work should be necessary. Indeed, such a success was to be expected from what is undoubtedly the most complete and authoritative volume on nervous and mental diseases today. In preparing this edition Dr. Church has carefully revised his entire section, placing it in accord with the most recent psychiatric advances. In Dr. Peterson's section—Mental Diseases—the Kræpelin classification of insanity has been added to the chapter on classifications for purposes of reference, and new chapters on Manic-Depressive Insanity and on Dementia Præcox included. While the changes throughout have been many, they have been so made as but slightly to increase the size of the work. A number of the illustrations have been replaced by newer and better ones. We can confidently say that this work will maintain the reputation already won.

Essentials of Materia Medica, Therapeutics, and Prescription Writing. By Henry Morris, M. D., College of Physicians, Philadelphia. Seventh Edition, Thoroughly Revised. By W. A. Bastedo, P. G., M. D., Instructor in Materia Medica and Pharmacology at the Columbia University (College of Physicians and Surgeons), New York City. 12mo, 300 pages. Philadelphia and London: W. B. Saunders & Company, 1905. Cloth, $1.00 net.

The student cannot find a better or more practical work on Materia Medica, Therapeutics, and Prescription Writing than this little essentials from the press of W. B. Saunders and Company. But then, this work is no exception in this respect to all the other numbers of this excellent series of

compends. Dr. Bastedo, in revising the book for this seventh edition, has brought it in accord with the new (1905) Pharmacopeia, introducing all the new remedies and carefully indicating their therapeutic doses and uses. For a work of three hundred pages it contains a mine of information so presented as to be easily grasped. We give it our unqualified endorsement.

Dose-Book and Manual of Prescription-Writing: with a List of the Official Drugs and Preparations, and the more important Newer Remedies. By E. Q. Thornton, M. D., Assistant Professor of Materia Medica, Jefferson Medical College, Philadelphia. Third Edition, Revised and Enlarged. 12mo, 392 pages, illustrated. Philadelphia and London: W. B. Saunders & Company, 1905. Bound in flexible leather, $2.00 net.

A glance at the contents of Dr. Thornton's book fully explains its attainment of a third edition. In addition to the consideration of the official and the more important nonofficial preparations intended for internal administration, weights and measures, solubilities, and incompatibilities, attention is given to the grammatic construction of prescriptions, illustrated by examples. In revising the text for this addition Dr. Thornton has made it conform with the new (1905) Pharmacopeia, the radical change in strength or name of many chemicals, drugs, and preparations already official, and the admission of many newer remedies necessitating the rewriting of a number of sections. We notice in the Appendix an addition of much value—a table showing the change in strength of important preparations, and also a list of average doses for adults in accordance with the new Pharmacopeia. Dr. Thornton's Dose-book is, as it always has been, accurate and up to date.

Baby Incubators. A Clinical Study of Premature Infants with Especial Reference to Incubator Institutions Conducted for Show Purposes. By John Zahorsky, A. B., M. D., Clinical Professor of Pediatrics, Medical Department, Washington University, St. Louis, Mo. Illustrated, 136 pages. Cloth, $1.00, net. The Courier of Medicine Co., St. Louis, Mo. 1905.

Robert Barr's 'The Speculations of John Steele. The F. A. Stokes Company, New York.

The Speculations of John Steele belongs to the modern school of business novel of which the stories of Messrs. Merwin and Webster and Mr. Robert Herrick are fair examples and for which the railroad and the Stock Exchange furnish the heroes. These are novels of the West, their scene is Chicago, their theme the making of money, and their atmosphere one of such hurry and bustle as to make New York seem like a country town in comparison. Insomuch as they deal with money-making, these books are alike; but there the resemblance ceases, for while Calumet K. is a record of achievement, of something added to the world's possessions, The Speculations of John Steele is merely a chronicle of money lost or won by gambling, passing from the pocket of one man to that of another without benefiting any one on its way. A well known author has called the speculator the pirate of commerce, and Mr. Barr's book is a story of adventures as interesting as those of Captain Kidd, for it has been reserved for America to surround the business of money-getting with the varied incidents that make a book of this type as thrilling as a novel of adventure and lifts the hustle of commercial life into the domain of romance.

John Steele is a type, not a character, and he is a fair example of that class of hustler which may be called typically American, in that no other country produces it. Starting, as have most of the successful men in this country, as a poor boy, he owes his first promotion to a quickness of decision which averts a collision at the lonely shanty where he is station-agent and general factotum. Inheriting some money from an uncle who had made it by judicious investments, John Steele, the author tells us, "began to wonder if he, too, had inherited this seventh sense of money-making which has produced those bulky, unearned fortunes for which America is celebrated or notorious."

His legacy enables him to test his suspected abilities, and he begins a series of speculations, in following which the reader shares in the excitement attending that form of diversion. Sometimes Steele is fortunate, sometimes he is not, but in all his transactions he displays a fertility of resource, a courage and decision that are only defeated when they are pitted against unlimited money and entire unscrupulousness. These forces are united in Peter Berington, whose personality more than suggests the most remarkable figure in the business life of our country today. Mr. Barr describes him as "the greatest financial brain the world had hitherto produced—the modern embodiment of Mammon."

This is the man whom Steele thwarts in his transactions in wheat and who now pursues him with a relentless, never-slackening desire for revenge.

It is characteristic of this class of novel that all its action takes place in the public eye. The scene shifts from office-buildings to railway stations and from thence to Pull-

man cars, but there is hardly the suggestion of a home in the book. There is not a dull page in the story. It moves on to a happy ending and the situations are so well handled that the reader's attention is held from the beginning to the end, while as he reads he begins to understand why the mere pursuit of unearned wealth in this country is so absorbing.

The Deluge. By David Graham Phillips. The Bobbs-Merrill Co., Indianapolis, Indiana.

It may be said that the author has done his strongest piece of work, up to the present time, in his new volume, The Deluge. It is the fashion nowadays for the Self-made Man in fiction to tell his story in the first person; and that is what Matthew Blacklock does in The Deluge, in his own easy, breezy vernacular, that is reminiscent of the days when he began life shining shoes, and before he ever dreamed that his enemies would one day call him "the biggest bucket-shop gambler in the world." The Deluge is not a novel of bucket-shops, but it is one of the few strong, vivid pictures of a war to the death between the great powers of finance; a reign of chaos in the business world, banks and trust companies going down like so many card houses; pandemonium broken loose in Wall Street. And all because Matt Blacklock, with the arrogance of youth, not only dares to thwart the plans of older, craftier brains than his, but unwittingly offends in an even deadlier way, by seeking for his wife, the woman whom his smoothest, wariest, most dangerous opponent secretly loves. Matt Blacklock is not a ladies' man; he is not a man to shine in a drawing-room; he makes you think, first of all, of a big, strong, proud-tempered bull, that is liable to lower its head and rush, and then things around him will begin to break. Once in a while, he wants something very badly, and when he wants anything in that way, he ends by getting it. When he met Anita Ellersly, he wanted her in just that way. But Anita had all those elusive, indefinable qualities that Matt Blacklock knew too little about to realize his own deficiencies—the qualities that accompany birth and breeding. Matt had just one thing that Anita lacked, and that was money; and her parents, for all their Knickerbrocker ancestry, are only too ready to sell her. He knows that he can force her into a marriage, even though she hates and despises him for forcing her. His confidence in his own powers is so great, that he never once doubts that he will be able to change that hatred into love. But during the months that follow, his clear, shrewd brain is less alert than usual; a woman's face haunts him in his Wall Street office, looks up at him from the ribbon in the ticker, blinds him to the familiar rules of the great game he is playing. That is why, when the big crash comes, he narrowly escapes being borne down in the general ruin. As already said, it is an uncommonly readable story of the most breezy type, and its chief merit lies in the cleverness with which the pulse of the stock market and the beat of the human heart are made to blend and harmonize.

An Island in the Air. By Ernest Ingersoll. The MacMillan Co., 64 Fifth avenue, New York.

While this story is designed to interest young people, it is also intended to instruct them. It relates the experiences of a party on their way to California a half century ago. The young people are separated from their elders, become marooned on a desert island, and are obliged to fight Indians and wild beasts, but they come out successful.

A Brother of Christ. By Ingram Crockett. The Broadway Publishing Company, 835 Broadway, New York.

A tale of Western Kentucky. An earnest worker among the eccentric Christadelphians is the "brother of Christ" and the hero. The story tells how he gradually breaks loose from the narrowness of this sect and comes into fuller light. It is also a love story, in which two women—one a coquette, the other a noble girl—are prominent figures. There is a villain who has his share in the tale.

Yolanda. By Charles Major. The MacMillan Company, 64 Fifth avenue, New York.

This is the story of a Prince and a maid of Burgundy. Mr. Major tells in his own way how Maximilian, Count of Hapsburg, is taken to the court of Burgundy by his tutor, a nobleman of the house of Pitti. Here he is to win in marriage the Princess Mary, with whom he has already exchanged some sentimental tokens. The poverty of the Hapsburgs and wealth of the Burgundians make this a very difficult affair, and the young count is obliged to overthrow many obstacles before he wins out in the end.

Edenindia. By J. P. Armour. G. W. Dillingham Company, New York.

A tale of adventure in which is portrayed a kingdom governed by "the applied selection of all that was best in the social systems of the world at the time of its founding." A young man, disappointed in love, goes to sleep in a balloon which is kept tethered on the lawn of a relative's home. The rope breaks and he is taken far over the seas and becomes an officer of state in an isolated place called Edenindia. The story narrates his experiences while living

in this place, which he eventually leaves to return to America, accompanied by his royal wife.

Tales of the Fish Patrol. By Jack London. The MacMillan Co., 64 Fifth avenue, New York.

The experiences of the author when he was sixteen during a year of service with the Fish Commission are here narrated. The titles of the tales are: White and Yellow, The King of the Greeks, A Raid on the Oyster Pirates, The Siege of the "Lancashire Queen," Charley's Coup, Demetrios Contos, and Yellow Handkerchief. George Varian has made the seven illustrations which are reproduced in halftone.

Sir Thomas Browne. By Edmund Gosse. The MacMillan Co., 64 Fifth avenue, New York.

Issued in the "English Men of Letters" series. A good idea of the way in which this biography is handled may be had by glancing at the table of contents: Early Years: 1605-1641, "Religio Medici," The "Vulgar Errors," "Urn-Burial" and "The Garden of Cyrus"—1658, Last Years: 1659-1682, Posthumous Writings—Personal Characteristics, Language and Influence.

What God Hath (Not) Joined. By Orr Kenyon. Dodge Publishing Co., 40 E. 19th Street, New York. Price $1.50.

The divorce question is the theme of this story. The wife of a young minister becomes infatuated with a new faith and her husband divorces her to marry another woman. Judge Koons, a prominent character in the story, brings to light a number of Biblical texts to prove that those whom God hath not joined in heart are already asunder, although a legal mistake of matrimony may have been made.

Whitewashing Julia. By Henry Arthur Jones. The MacMillan Co., 64 Fifth avenue, New York.

An original comedy in three acts and an epilogue by the author of "Mrs. Dane's Defence."

Abstracts of the Leading Articles of the Month.

The Prophylaxis of Postoperative Cystitis.

Baisch (Munch. Med. Woch.) says that all operations upon the female genitalia are apt to be followed by an inability to pass urine, and the use of the catheter in many of these cases is followed by severe cystitis, which often leads to an ascending affection of the kidneys and frequently death. This has been especially true of obstetrical practice and many of the obstetricians have endeavored to seek other means of producing spontaneous discharge of the urine. Bumm has definitely shown that it is not alone the catheter or the bacteria which may be introduced along with it which is responsible for the inflammation, but that there must also be a certain predisposition on the part of the bladder, which is usually found in injuries received during the confinement or during operation. This is especially true of operations about the vagina, in which so often there is more or less traumatism of the bladder. Bacteria rarely produce any disturbance when introduced into an absolutely normal bladder.

Still another fact which favors the development of cystitis is a retention of urine, especially in cases of prolapsus of the uterus or of marked laceration of the perineum, in which conditions it is frequently impossible to completely empty the bladder. Postoperative cystitis, however, rarely develops in those cases in which the use of the catheter is not necessary, and for that reason every possible attempt should be made to avoid its use. If necessary, the most careful aseptic technic should be employed. Furthermore, in all operations in the vicinity of the bladder every possible effort should be made to restrict the amount of traumatism. It is a well-known fact that strong disinfectants, and particularly hygroscopic solutions (as, for instance, alcohol) exert a marked stimulation upon the bladder which leads to a frequent expulsion of the urine. Based upon these facts, the writer has made use of glycerin in the attempt to induce spontaneous emptying of the bladder. The method is to inject twenty cubic centimeters of a 2 per cent. sterilized boro glycerin solution through a catheter on the evening after operation. The action is usually prompt; in from 5 to 10 minutes the patient will spontaneously empty the bladder without any unpleasant after effects. The urine is as a rule subsequently passed without any difficulty and if there should be any difficulty the injections are repeated.

In certain cases the use of the catheter appears to be absolutely necessary. It is advisable to wash out the bladder after it is emptied with a 1-1000 solution of silver nitrate, or in some instances with a 3 per cent. solution of boracic acid. In this way it is usually possible to prevent the development of a cystitis.

He urges, so far as possible, the avoidance of the catheter in all instances; the use of boro glycerin where it is impossible to spontaneously empty the bladder; and in cases where it is necessary to use the catheter, use should be made of disinfectant solutions for the irrigation of the bladder.

Conceptional Syphilis and Paternal Transmission.

Jesionek (Munch. Med. Woch.) reports a case which appears to prove paternal transmission and conceptional syphilis. A

girl of eighteen was admitted to hospital for gonorrhœal endocervicitis on July 14, 1903. A careful examination failed to reveal any sign of chancre or scar thereof. Signs of pregnancy developed, and in December a roseolar rash appeared, followed by secondary syphilis. This occurred in the fifth month of pregnancy. A male child was born dead in the middle of the eighth month. The fœtal heart was heard the day before birth. Well-marked signs of congenital syphilis were found in the viscera and osteochondritis of the epiphyses. This would appear to be a case of conceptional syphilis or choc en retour, since no other source of infection was found. The only objection is the possibility of recurrent roseola and syphilides. The widespread signs of syphilis in the fœtus would support the view of paternal transmission, as it is hardly likely for such an extensive disease to have developed in two and a half months on the supposition that infection came from the mother's syphilis. He says that the idea of the sperm not being infectious is theoretical and not proved. There are very few records of experimental inoculation with semen, and in some of them which were negative the semen might not have been in an infectious state. The author believes it probable that the semen causes infection during coitus, because it is rare for a man with a chancre on the penis to have connection, and secondary lesions on the penis are rare. The writer relates the case of a medical man, who, after contracting a digital chancre, and undergoing an inunction cure, had connection with his wife. A chancre developed in the wife at the spot where ejaculation was known to have taken place. Jesionek concludes that infection in this case occurred by the semen, as there was no sore on the penis.

Perineal Zoster.

Cushing (Johns Hopkins Hospital Bulletin) says that according to Head's tabulation of 378 cases, in seven instances only did the eruption have a sacral distribution, the lowest segment of which mention is made in his paper being the third sacral.

Only twice in his series of cases of trigeminal neurectomy has the operation been followed by an outcrop of herpes. In the first the distribution of the vesicles on the perineum was taken to represent a lesion of the fourth sacral posterior root ganglion. There was an accompanying vesiculation of the herpes febrilis type on the non-anesthetic side of the face. In the second case sensory symptoms, such as are the frequent precursors of herpes zoster, appeared after the operation, having a bilaterial distribution similar to that in the first case. The symptoms were interpreted as indicating a lesion of the posterior root ganglion, which did not suffice to cause vesiculation; herpes zoster without eruption, as described by James Mackenzie. This perineal disturbance was accompanied, as in the first case, by a quite extensive facial herpes, which again failed to encroach upon the skin field rendered anesthetic by the ganglion extirpation.

The pathology of herpes facialis seu febrilis has been the occasion of dispute. Many have thought the lesion to be quite distinct from that which produces true herpes zoster. Howard, however, has found lesions in the Gasserian ganglion in a case of common facial herpes accompanying pneumonia. This observation, together with those above cited, that after Gasserian ganglion extirpation a herpetic eruption does not occur over the resultant anesthetic field, suffices to render it most probable that posterior root ganglion lesions are responsible for the common forms of herpes about the lips and nose as well as for zoster.

The perineal eruption in the first case and the hyperesthetic area in case two with a similar distribution allow of certain generalizations as to the cutaneous skin fields of the lower sacral segments. In the ordinary diagrams with the subject in the erect posture the lower (fourth and fifth) sacral fields are completely hidden. It is necessary to put the body and lower extremities in the embryonal position in order to understand clearly the configuration of the skin fields below the second sacral, this being the lowest to enter completely into a leg distribution. The coccygeal, fifth, fourth, and third sacral areas surround the caudal end of the body in concentric fashion, the strips running from mid-dorsum to mid-venter just as do the thoracic and abdominal skin fields, and like these retain in large measure their simple, primitive, and undistorted arrangement.

Arterial Degeneration.

Rankin (Edinburg Medical Journal) gives the following points as of prominent diagnostic importance in this condition:

1. The patient is past middle life or bears the stigmata of premature senility.

2. The superficial arteries are hard, prominent, tortuous, and locomotive.

3. The pulse is resistant, of high tension, of a variable rythm and of diminished amplitude.

4. The heart is hypertrophied, especially the left ventricle. The second aortic sound is accentuated, and, if dilatation takes place to any degree, a systolic murmur becomes established either at the apex or in the left auricular area.

5. Organic manifestations are frequent and diverse. They vary according to the

seat of maximal distribution of the diseased vessels.

6. There is, in a large proportion of cases, a history of syphilis, alcoholism or physical strain. In many, the patient pleads guilty to all three.

7. There may be a family history of gout or of some other constitutional instability, which conduces to imperfect metabolism.

In the matter of treatment, the patient should lead a quiet life, avoid dietetic excess, and take a reasonable amount of exercise. Alcohol is contraindicated, the food should be simple and red meat should be restricted, especially in patients with the gouty diathesis; the bowels should be evacuated daily and simple tonics prescribed.

When anginoid attacks follow on vertigo and dyspnœa, and are accompanied by a high tension pulse, the patient should be kept in bed, fed on simple food, and ordered the following mixture, three or four times in each twenty-four hours: Iodide of sodium, 10 grs.; solution of nitro-glycerin, 1 per cent., 2 minims; Fowler's solution, 3 minims; decoction of bark, 1 oz. He should also have 1 gr. of calomel at bedtime, every night for a week, followed in the morning by a sufficient dose of sulphate of soda or sulphate of magnesia to ensure a satisfactory result. If compensation has broken down and there is evidence of cardiac dilatation, digitalis should be given, combined with nitro-glycerin; tincture of digitalis, 15 minims; solution of nitro-glycerin, 1 per cent., 1 minim; solution of strychnine, 5 minims; peppermint water, 1 oz. This mixture should be taken every six hours, until the regularity of the pulse becomes re established, and then the dosage lessened one-half. Later, when the pulse has become normal, a tonic pill of iron, strophanthus, strychnine and rhubarb should be given. If the cardiac failure has gone on to the production of general congestion of the liver and lungs, venesection or leeches should be employed.

A Strange Result of Iodoform Dressing.

Jones (The London Medical Press and Circular) reports the following case: The patient, a woman of thirty, had recently undergone an abdominal operation. The course was favorable until the third day after the operation. Irritation and some smarting in the neighborhood of the wound was then complained. The wound had been stitched with celloidinzwirn, a pad of moist sterilized 10 per cent iodoform gauze being placed over it with coeletin. On raising the dressing the nurse found some slight swelling and redness along the area of the incision. The irritation increased, and the next day the iodoform was removed and the wound lightly sponged over with some weak formalin solution, dried and dusted with dermatol, covered with plain sterilized gauze, and protected with coeletin. The distress continued, and the next day several large vesicles appeared. The arms and hands now became involved, later the legs. There were no constitutional symptoms. The skin healed by first intention. It was learned that many years before the patient had had an ulcer on the leg. This had been dressed with iodoform, with much the same results as in the present instance. From her childhood the patient had suffered from an eczematous tendency.

The Reaction of Protoplasm in Relation to Chemotaxis.

Barratt (British Medical Journal) says that exposure of paramœcia to acids or alkalies of concentration sufficient to kill in twenty to thirty minutes does not affect the staining reaction of the organisms.

Prolonged exposure of paramœcia to acids or alkalies of higher concentration causes the well known appearance of "accentuation" of basic and acid staining respectively, but this is a change affecting the protoplasm after death and therefore of a different order from that occurring in relation to chemotactic phenomena.

Paramœcia killed by the constant current resemble paramœcia killed by acids and alkalies of minimum lethal concentration, in respect of the absence of any alteration of staining reaction.

The chemical reaction of the protoplasma of paramœcia cannot be determined by means of indicators in respect of a concentration of H and OH ions, which is less than 0.001 N. Within this limit the protoplasm, living or dead, gives no evidence of acid or alkaline reaction. The protoplasm of paramœcia killed by mineral acids or by alkalies of low concentration gives no evidence of acid or alkaline reaction with methyl orange or phenolphthalein.

Paramœcia killed by the constant current do not exhibit any acid or alkaline reaction.

Salicylate of Iron in Erysipelas and Acute Tonsillitis.

Gray, (Edinburgh Medical Journal) calls attention to a chalybeate, which he has used in many cases during the last four years, and believes to have special advantages. This agent is prepared by the addition of the tincture of the chloride of iron to a solution of salicylate of soda. The precipitate, which is produced, is of a deep violet color. When the procedure is reversed and the solution of sodium salicylate is added to the solution of iron chloride, the product is rust colored to varying shades of yellow. The formation of the violet precipitate can be avoided, or it can be redissolved when formed, by the addition of a small quantity

of potassium chlorate. In the latter case the result is a solution varying in color from a deep violet to a Vandyke brown, according to the proportion of potassium chlorate added. Both in powder or in solution made with the above addition, the salicylate of iron is very active. When recently prepared it acts as a powerful febrifuge, without, as the rule, producing diaphoresis. It reduces temperature, and probably thus gives the phagocytic and toxine destroying action of the blood and tissues free play. This, with a problematic antiseptic action, may account for its alleged specific effect in erysipelas and acute tonsillitis. Out of fifty cases of erysipelas, in which this preparation was employed, none lasted more than forty-eight hours from the commencement of treatment. In the majority, at the end of thirty-six hours, the disease had markedly improved. In all, the temperature remained at or just below normal, after the drop in temperature following the first or, at latest, the second administration. As a local treatment nothing was used except linen cloths wet with water or oatmeal water, and frequently changed. In all the cases the headache and general malaise disappeared at the end of eight hours. The only supplementary treatment was calomel (grain i to ii) at night occasionally, or a saline aperient in the morning. Patients were kept on a milk diet until the temperature was normal, then ordinary diet was resumed. In 250 cases of acute tonsillitis, whether simple, rheumatical, diphtheritical, or scarlatinal in origin, similar prompt and successful results have been observed. As a local treatment, the author prefers a gargle made by adding 7½ to 30 minims of tincture of iodine to one pint of water, used every five hours. The following pigment was applied when required:

℞ Tinct. iodi 3ii
Glycerit. acid tannic ad 3j.
M. Paint the pharynx every four or eight hours, as required.

In some cases liq. hydrargyri chlorid. (two drachms) was added to the above pigment. The gargle and paint was used in simple cases, thrice daily; and when false membrane was extensive or resistant every four hours. "In most membranous cases, whether true Loffler's bacillus was present or not, the membrane disappeared in the first twenty-four hours, in twenty after forty-eight hours, and in one not until the fourth day." It is considered inadvisable to continue the use of the iodine preparations for throat or nose for longer time than three days, on account of the irritation set up, which, however, rapidly disappears upon the substitution of a weak alum gargle, or nasal douche. In simple acute tonsillitis, with or without pus, the result of the treatment is described as "practically marvelous." The solution employed is made by dissolving one drachm of sodium salicylate in two ounces of water. To this is added a mixture consisting of tr. ferri perchloride (B. P.), two drachms; potassium chlorate, half a drachm; glycerin, half an ounce; and water to make three ounces. Water is then added to make up to eight ounces. Of this, two tablespoonfuls was given every three or four hours. The taste is described as not unpleasant, and the preparation is well tolerated by the stomach. It is free from the dangerous effects of some antipyretics. In only one case was the action excessive. In a child of 5 years, suffering with chickenpox and high temperature, 104.5 degrees, one grain of the powder (sod. salc. c. ferro) caused the temperature to fall (to 96 degrees) with symptoms of collapse, but the child recovered eventually.

Faults in the English Army Medical Service.

Evatt, in the Journal of the Royal Army Medical Corps, takes occasion to criticise the method of organization in the English service as practiced in the Afghan campaigns as follows: "The medical service mobilized in a hurry, with little cohesion, with no defined method of work, changed over at a day's notice from an old system to one entirely novel, with units not existing in peace for war, but gathered together from the four winds of heaven, was not, and never can be, under those conditions, an easy department to work on service. Today things are better, at any rate people begin to know what they want; but the true model lies still before them, and that is the army one serves in and the units one sees daily at work around. With such disciplined units, organized in peace for war, their work carefully thought out, their staff under the same control in peace as in war, with enough subordinates to do the wearying detail work, with orderlies trained and skilled in the care of the sick, and native attendants organized, drilled and trained as sepoys, as well as hospital attendants, success may come, if with these there are sympathetic commanders, who remember that the title General Officer means that he is equally interested in, and responsible for, all under his command. These ideals are not impossible nor even difficult to realize. The faults existing are not wholly on the military nor wholly on the medical side; both are to blame, and both have prejudices that must be either dissolved or rent asunder. Either the medical service should throw up its claims to autonomy and accept a subordinate role with military commandants in every field hospital and a disciplinary and

executive staff apart from the technical medical staff, or it should itself boldly claim all the titles, powers, and responsibilities which such commandants would receive. Men must know whom they are to obey, and discipline must be maintained, and the means of doing work must be given."

The Digestibility of Evaporated Cream.

Timothy Mojounier M. S. says that evaporated cream is a trade name employed by manufacturers to distinguish their preparation of unsweetened condensed milk from older commercial "condensed milk" which is almost synonymous with the white pastry preparations owing their stability to the preservative influence of sugar. Evaporated cream is prepared by taking full cream cow's milk, sterilizing and evaporating it by special processes to a cream-like consistency, thus reducing its volume about two and one-half times. The advantages claimed are that the butter fat is held in permanent suspension; an absolute freedom from bacteria so long as the air tight container remains unopened; uniformity of composition and that the casein is more easily digested than in raw milk.

By a series of most accurate and scientific experiments, both clinically and in the laboratory, the following conclusions have been determined:

1. The protein in evaporated cream digests a little more rapidly where treated with artificial gastric juice than does that of raw, pasteurized or boiled milk. The protein in evaporated cream precipitates in a fine flake condition, whereas that of raw milk is inclined to be more in the form of a lumpy curd.

2. The protein in evaporated cream is almost entirely soluable in artificial gastric juice. Its total digestibility by this method compares very favorably with that of raw, pasteurized and boiled milk. The small difference found was in favor of the evaporated cream.

3. By means of natural digestion experiments with a child and with a man the child was found to digest evaporated cream a little more completely than did the man. As a result of three experiments with each subject it was found that in the case of the child that only 3.31 per cent. and in the case of the man only 6.81 per cent. of the entire solid matter of the food remained undigested. Forster found 6.4 per cent. of the total solids of the milk of a nursing child to be digested.

4. The total digestibility of the protein unevaporated cream after making corrections for the metabolic products in the feces in the case of the child was found to be 98.48 per cent., or very nearly what was formed by means of artificial gastric juice, namely, 98.89 per cent. With the man it was found to be 93.10 per cent. Both of these values are highly satisfactory for evaporated cream.

5. The butter fat and milk sugar were both very completely digested and assimilated by the two subjects. The girl digested 98.80 per cent. of the fat and 97.78 per cent. of the sugar. The man digested 95.84 per cent. of the fat and 96.85 per cent. of the sugar.

6. The child digested nearly 18 per cent. more of the mineral matter than did the man. This accords with the accepted theory that a child requires more mineral matter in proportion to its body weight than does an adult, because its bones are growing and developing.

7. The total energy of fuel value of evaporated cream is almost entirely available to the body. The child used 97.25 per cent. and the man 94.59 per cent. of the total energy contained in the evaporated cream which they used.

8. The health of both subjects was normal during the experiments. The child gained in weight an average of about one pound a week during the three experiments and relished its diet. The man lost in body weight, but gained in protein during all the experiments to the amount of nearly one-third ounce of protein per day.

9. Evaporated cream, like other forms of pure milk, is an economical article of diet, because its nutriments are practically all available to the needs of the body.

The child on whom these experiments were made was 14 months old. The diet was evaporated cream, cane sugar and water. The man was 32 years old; diet, evaporated cream, cane sugar and white bread.

Common Duct Obstruction.

Dr. J. W. Long, of Greensboro, North Carolina, read a paper on common duct obstruction at the recent meeting of the Southern Surgical and Gynecological Association. As compared with gall stones in the gall bladder the condition is many times more serious. He quoted the as yet unpublished statistics of the Mayo clinic, where there have been more gall stone operations done than in any other clinic in the world, showing that in simple gall stones in the gall bladder, the mortality of operations is less than one-half of one per cent., while the mortality from obstruction for common duct obstruction ranges from 11.9% in benign cases to 40% in malignant cases. These facts were brought out to emphasize the prophylactic value of operating while the stones are yet in the bladder.

Touching the etiology of common duct obstruction he took the position that prac-

tically all cases were due either to stones or to malignant growths, which themselves were caused by the irritating presence of stones. Gall stones may exist in the gall bladder for a long while without producing symptoms, but once in the common duct, not only pronounced symptoms, but many serious complications arise. The mortality in these cases is due to the complications, the cholemia, infection, contiguous, inflammation and exhaustion due to hemorrhage at operation. He emphasized the fact that common duct obstruction could be treated only by surgical measures. After removal of the obstruction, the first consideration is drainage, since it is imperative to overcome the infection, and second, that no operation must be deemed finished until the patency of the opening into the duodenum is assured.

Attention was called to the importance of not removing the gall bladder in the operation of choledochotomy, since stones occasionally reform in the common duct and in these cases the gall bladder serves for drainage.

A number of cases of operation for common duct obstruction occurring in the hands of Dr. Long were reported, showing the profound disturbance caused by the stones, and the great relief afforded by their removal. In one case it was noted that the stones had ulcerated through the side of the gall bladder and into the common duct, an exceedingly rare occurrence.

Static Electricity in the Treatment of Neurasthenia.

Bonnefoy (Archives D'Electricite Medicale) is of the opinion that static electricity is one of the best of therapeutic measures in the treatment of neurasthenia, and that its action is of a triple nature: (1) upon the circulation, by increasing the rapidity of the heart action, raising the arterial tension, and increasing the capillary circulation; (2) upon the respiratory capacity of the blood, by increasing the ability of the red blood corpuscles to carry oxygen; (3) improving the power of digestion and assimilation, increasing the appetite and accelerating the digestive functions, thus producing a rapid increase in weight. The treatment should be administered at first of moderate strength, otherwise the increased arterial tension may increase the insomnia when a patient is unaccustomed to the application.

One case treated was a man, aged forty, suffering with intense headaches, insomnia, great muscular debility, a suicidal tendency, and entirely unable to attend to his business. The first treatment was given in the middle of December, and was of ten minutes' duration. The arterial tension was immediately increased more than two centimeters, with the result that the patient was unable to close his eyes all night. A six-plate machine was used. Only half the strength of the machine was used at the next treatment, and the patient was able to sleep six hours during the night, in three different periods. By the twentieth of January the full strength of the static machine was employed and he slept for five or six consecutive hours every night. His headaches disappeared, his appetite and digestion improved, and he was able to work a little without producing the cerebral fatigue which the least intellectual effort had caused him previously.

Another patient was a lady thirty years of age, with a very nervous temperament, who had suffered from hysterical crisis with loss of consciousness, following an attack of scarlet fever four years before. These had become so severe that she was able to take very little food and was bedridden. Her arterial tension at the wrist was eight centimeters at the beginning of the treatment. Her condition had very greatly improved at the end of one week. She passed comfortable nights, and her sleep was quiet and restful. Her appetite returned, and the arterial tension rose to eleven centimeters. At this time she was given a short application of static sparks over the dorso-lumbar region and lower limbs. At the end of two months' treatment she was able to walk six or eight miles in the open air, and her arterial tension was fifteen centimeters. Several months later she was still feeling very well, and the arterial tension was fifteen centimeters, no treatment having been given in the meantime.

Early Ocular Signs of Dementia Paralytica.

Holden (Journal of Nervous and Mental Diseases) reaches the following summary:

The shape of the pupils was perceptibly irregular in fifty-one patients, 70%, an abnormally high percentage considering the ages of the patients.

Irregularity of the pupils was found in thirty-two patients, or 45%.

The sensory pupil reflex was absent in sixty-one patients, or 87%; a very high percentage considering the ages of the patients.

The direct light reaction was perceptibly sluggish in one or usually both eyes in fifteen patients, or 21%.

The direct light reaction was entirely wanting in one or usually both eyes in twenty patients, or 28%.

The convergence reaction was sluggish in six patients, or 9%, in all of whom the light reaction was sluggish or wanting.

The size of the pupils ranged from 1.5 to

5mm., and in thirty-seven patients, or 55%, one or both pupils were smaller than average size for patients' age and refraction.

Great care was taken to exclude cases of alcoholic pseudo paresis.

Treatment of Abortion in General Practice.

Moebius (British Medical Journal) discusses the treatment of abortion in general practice. He says the most rational and physiological method of treatment is the expectant treatment, he considers that this is only sare for the patient if she is in the hospital, and that such an expectant treatment as one would carry out must be fraught with danger if the patient is not continuously watched by trained medical practitioners. The bleeding may come on quite suddenly and profusely, and before the doctor can be with his patient it may be too late. The question to decide is how best to empty the uterus completely and rapidly. This must be done with the least danger and with the greatest possible protection to the patient. All instrumental methods are to be avoided. This applies equally to the curette, the abortion forceps, and all other instruments. He then proceeds to describe the method which he believes to be the safest to follow. When the os and the cervix are patulous to the finger, he immediately clears out the uterus digitally. When two or more fingers can be passed into the organ, the procedure is easy. If only one finger can be passed, the operation may be found extremely difficult, and then it is better to plug, and two or three days later the whole ovum may be found just behind the plugging. As a rule, however, the difficulty does not lie so much in the detaching of the placenta as in the emptying of the detached portions from the uterus. This can be secured by washing the cavity well out by a powerful irrigation, care being taken to avoid bringing air into the uterus. The finger should not be removed from the uterus until everything has been detached from the wall of the organ. If this is impossible, much care must be taken to disinfect the finger again before reinserting it. As soon as the uterus has been emptied the organ contracts powerfully. This may be taken as a guide as to when all has been removed. If the water returns clear on irrigating one may be sure that the organ is empty. When the os is scarcely or not at all dilated, one should plug the cervical canal, and if possible the uterine cavity. Vaginal plugging has disadvantages. It may induce pains, and the bleeding may soak through the packing. The only disadvantage of packing the uterus is the risk of sepsis, and this must be overcome by employing well prepared iodoform gauze and care in the plugging. The necessary instruments are: Two vulsella, a medium sized Sims speculum, an irrigation tube, a long pair of plugging forceps (Duhrssen's), and a catheter. The gauze should be kept in a special box, which can be held between the knees while one is plugging. For the cavity he uses gauze of 3 cm. (a little over 1 in.) in breadth, while for the cervix the breadth is 5 cm. (about 2 in.). The plugging may be left for forty-eight hours and the temperature carefully watched. In conclusion, he speaks of the use of dilators, which he does not recommend as a routine treatment.

Germ Centers of Lymphatic Glands and Secondary Carcinomatous Deposits.

Burton Cleland (The London Medical Lancet) mentions the several appearances that the germ centers may present, and in what way they differ from carcinomatous deposits. The cells which compose the germ centers are larger than the surrounding lymphocytes, having more protoplasm and a larger and vesicular nucleus. The whole area stains lighter than the surrounding part. Mitotic figures are nearly always numerous, and at the edge of the area the cells rapidly, but by distinct gradations, become converted into lymphocytes. The areas are usually small and indistinctly circumscribed, and in such conditions are not likely to be mistaken for a cancerous growth. But when associated with chronic irritation they assume a most striking appearance, presenting an increase of size and of mitotic activity, which suggests a form of compensatory hypertrophy. These hypertrophied germ centers form very sharply defined spherical or oval areas, taking a much lighter color. The cells composing them are of nearly uniform size and a little smaller and much more regular than those of cancer; they are closely packed together with very little stroma, though an occasional capillary may be noticed; the nucleus resembles closely that of an epithelial cell; and mitoses are often more numerous or as numerous as in cancerous growth. All these characters show how hard it may be to distinguish the one from the other. The most important difference is found in the boundary zone of each. The somewhat larger and more irregular cells of carcinoma are separated sharply and distinctly and often by a thin zone of fibrous stroma from the surrounding lymphocytes, and each cell at the periphery can be relegated at once into one or the other class of these two. This is not the case in the outer zone of germ centers. Here both germ center cells and lymphocytes tend to be arranged in concentric rings formed of a delicate fibrous tissue, and all gradations are seen between undoubted germ center cells and undoubted

lymphocytes. Under low power the appearance of peripheral limitation is reversed.

Aneurism of the Abdominal Aorta.

William Osler in The London Medical Lancet tabulates analytically 16 cases. These 16 cases occurred among about 18,000 medical cases admitted to the Johns Hopkins Hospital; however, the incidence varies in different localities. The ratio of abdominal to thoracic aneurism was about 1 to 10. Of the 16 cases, 14 were males and 2 were females, which fact agrees with all statistics. Nine patients were under forty years of age. Seven had been heavy workers. Nine gave a definite history of syphilis; four others doubtful. Ten were alcoholics. In 12 the aneurism was saccular, in three diffuse, and in one dissecting. In two patients the condition was latent. Persistent, agonizing pain was present in thirteen, and is usually the first indication of the trouble, usually being due to pressure upon or stretching of nerves, erosions, or rupture with diffusion of blood. Nausea and vomiting were early and severe symptoms in two cases. Hematamesis was not observed. Constipation was a common feature. Intermittent claudication occurred in one case. The patients were usually well nourished and healthy looking. Hemorrhage from the bowels occurred in one case. Pressure may lead to dilatation of the stomach or esophagus. The obscurity of the symptoms is universally recognized. Diagnostically, pulsation or throbbing, evident to the eye of the observer, or felt by the patient, is the most obvious feature of the disease, but it is to be borne in mind that abdominal pulsation occurs in other conditions, as nervous or hysterical females or in neurotic or hypochondrical males, tumors, anemia and aortic insufficiency. A mistake is not likely to occur if it is remembered that no pulsation, however forcible; no thrill, however intense; no bruit, however loud—singly or together—justify the diagnosis of an aneurism of the abdominal aorta, only the presence of a palpable, expansile tumor. Among other causes which may suggest aneurism are regurgitation into the inferior vena cava and a very sclerotic aorta with a thin abdominal wall in old men. So far as treatment is concerned it is not to be expected that much can be accomplished toward a cure. The various medical and surgical measures were applied in this series with an almost universal negative result.

Acute Pericarditis Complicating Acute Lobar Pneumonia.

Chatard (Bulletin of the Johns Hopkins Hospital) states that during a period of sixteen years 665 patients suffering from acute lobar pneumonia were treated at the Johns Hopkins Hospital. Acute pericarditis was present in 31 patients or 4.66 per cent. In 13 or 41.9 per cent. pericarditis was recognized during life; in the remaining 18 patients it was only recognized at autopsy. The average age of the patients was 32.5 years. The complication occurred most frequently in young adults. There were 22 males and 9 females. Of the males 10 were white and 12 colored; among the females 5 were white and 4 were colored. The average duration was six days. The right lung was involved 13 times; the left lung 5 times, and both lungs 13 times. Pleurisy was by far the most common complication. The mortality was extremely high, 29 patients out of 31 dying, or about 93.5 per cent. A marked history of alcoholism was given by 10 patients. Two patients gave a history of previous attacks of pneumonia. Another had had both pneumonia and acute rheumatic fever previously, and one either acute rheumatic fever only. Two patients showed a general pneumococcus infection, the organism being cultivated from the blood during life. Delirium occurred in 19.3 per cent. The autopsy records showed the variety of pericarditis as follows in order of frequency: Acute fibrino-purulent pericarditis, 10 times; acute sero-fibrinous pericarditis, 9 times; acute fibrinous pericarditis, 8 times; acute purulent pericarditis, 2 times. In 3 instances only was a very large amount of fluid present. The respective amounts in these three cases were: 500 c.c.; 800 c.c.; and 1,000 c.c. The pneumococcus was obtained in culture in 23 instances. In looking over the clinical and pathological records, one is especially struck with the seriousness of pericarditis in acute lobar pneumonia. A striking fact is the more frequent involvement of the lung and pleura on the right side. This would seem to indicate that pericarditis is due to a metastatic process, through the blood or lymphatics rather than by direct extension from the lung or pleura. This is of interest in the light of the fact that great stress has been laid by many in previous reports on the synchronous involvement of the left lung and pleura. The author concludes by stating that pericarditis developing during the course of an acute lobar pneumonia is a most serious and important complication, occurring more especially in young adults, frequently insidious, latent and often not recognized during life. It appears to arise as frequently by a metastatic process as by direct extension. Treatment is very unsatisfactory and often unavailing, except when the fluid is present, in which case it is more surgical than medical. In all patients with pneumonia a most careful watch

should be kept on the heart, as this complication appears to be much more frequent than is generally supposed, and urgent treatment in the early stages may materially reduce a high mortality.

Prostatectomy.

Czerny (British Medical Journal) states that prostatectomy has not received in Germany the recognition to which, as it is based on the anatomical work of German surgeons and is likely to maintain its position as an efficient method of treatment, it may fairly lay claim. At the present day prostatectomy, it is pointed out, is certainly indicated in cases of prostatic hypertrophy in which catheterism is difficult, and life is rendered intolerable by local pain, the formation of urinary calculi, and cystitis. In such cases the modern surgeon is led to decide not between prostatectomy and catheterism, but between the former and Bottini's operation. This method, in the author's opinion, is indicated only in clearly defined cases of a relatively small prostate with a well marked middle lobe. In experienced hands one third of such cases may be cured and another third considerably relieved by Bottini's operation, which is not followed by fistula, and does not impair for so long a time as prostatectomy the functions of the bladder. The latter operation is probably attended by a higher mortality, but insures greater freedom of micturition. Whether the perineal or the transvesical method of prostatectomy is to be preferred is still open to question. Probably each method has its special indications. The perineal method favors a more effectual drainage of the bladder, and for this reason may be selected in cases of cystitis. The resulting fistulæ are slight and transient, and the action of the bladder is not more disturbed by this than by the transvesical method. The mortality of this method seems to be somewhat higher than that of perineal prostatectomy. Of fifteen cases of perineal prostatectomy practiced by the author, in two of which the gland was affected by malignant disease, two were fatal, six were completely cured, and the remaining seven were, with regard to removal of urinary obstruction and to freedom from pain, considerably relieved. In four of the last mentioned cases the patients were troubled by persistent incontinence and open perineal fistula.

The Therapeutic Value of Alcohol.

Blackader (Montreal Medical Journal) says that alcohol is not an efficient cardiac or respiratory stimulant, but when administered in frequently repeated small doses its action on the circulation may be regarded as favorable. In some conditions with a determination of blood to the interior of the body, as indicated by cold extremities, livid skin, small pulse, scanty urine, and high rectal temperature, a condition which has been described as bleeding into the splanchnic area, the administration of alcohol by dilating the superficial vessels and equalizing the circulation may be of considerable service. Alcohol may also be of value when given to counteract the contraction of the peripheral vessels in the chill or rigor often associated with the onset of disease.

Alcohol is not a stimulant to the nervous system. Its action is that of a narcotic, benumbing sensation, including that of fatigue, allaying subjective symptoms, relieving nervous strain, and promoting rest. No other narcotic can be used so freely with so few injurious by effects. Alcohol in disease is a valuable food, replacing carbohydrates, and as a general rule saving proteid metabolism. It places no tax on the digestive organs; on the contrary, if used intelligently, it increases their secretion, thus in low and asthenic conditions assisting the digestion and favoring the absorption of other foods. In such conditions it may have also a favorable action on the hepatic cells, stimulating them to increased activity.

In infections of all forms alcohol should be used cautiously. In such cases it may be of value to the system either as a food itself or as favoring the absorption and digestion of other foods, but in large amounts it may and probably will do harm by destroying the resisting powers of the organism.

As clinicans we have to recognize that the effect of alcohol varies much with the individual and that its employment demands much discrimination and careful and frequent observation. We should also bear in mind that its prolonged use is liable to lead to degenerative changes in the heart, bloodvessels, and secretory organs.

The Treatment of Inebriety.

Sheil (British Medical Journal) says temperance in the sense of moderation was of no avail to the drunkard, because it was impossible to him, while as for total abstinence, although perhaps it endure for a year, it usually was but a thing of a day. In almost every case a drink offered in a friendly spirit would lead to a fresh outbreak, with worse results than before.

The habitual drunkard's act is merely permissive, while the inebriate's act effects a comparatively very limited class of persons; namely, criminal and habitual police-court inebriates. It in no way reaches an immeasurably larger class of persons, who rarely, if ever, figure in police-court records

or in public documents at all. This is not because they are not drunkards, but because of the endless sacrifices made for them by their friends in the hopes of keeping them out of trouble, and of avoiding open scandal. Few people but medical men have any idea of the extent of the evil, and the number of silent tragedies due to inebrity.

A considerable percentage of these cases might prove to be curable if early and proper treatment could be enforced, but at present this is impossible. They must themselves apply for seclusion in a retreat, and this they fail to do until matters have gone very far. This is quite natural because many inebriates are as incapable of appreciating the gravity of the disease as any legally insane person. What is wanted in England is the power to detain in a retreat for a period medically deemed to be advisable, any person who is proved to be a drug or drink inebriate.

Twenty-six Consecutive Cases of Gastroenterostomy.

Anderson (The London Medical Lancet) reports his twenty-six gastroenterostomies, which comprise one for recent ulcer, eleven for chronic ulcer, eight for pyloric stenosis, and six for cancer. There were three deaths, which number appears to the author to be too high. One death was due to bronchopneumonia and cardiac failure, one to cancerous metastasis, and one to impaction of feces in the colon.

In every instance there was a palpable lesion, and prolonged medical treatment had been without avail. The great benefit from the operation has been very striking. It appears to be productive of nothing but good to the patients and leaves no disability. Within three weeks after the operation the patients are eating the ordinary hospital diet. As a rule vomiting, except that from anesthesia, ceases as soon as the operation has been performed. The rapid increase in weight is remarkable. The most striking improvement occurs in cases of old callous ulcer about the pylorus with stenosis.

In one case in which there was much involvement of the pyloric region and some of the neighboring glands with what appeared to be cancer, even to the microscopist, gastroenterostomy was done, and ten months later the patient appeared in good health. The author believes that in such cases, when the patient will not bear gastrectomy, it is quite worth while to do gastroenterostomy, and thus give him the benefit of any doubt as to diagnosis. Posterior gastroenterostomy has been done by Anderson in all his cases, and the suturing has been done without any instrumental aid. The objections to instrumental aid are that a foreign body is left in the anastomotic wound, and the opening has to correspond with the dimensions of the bobbin or button and cannot be made of such size as the conditions in some instances require. Too small an opening is a late but recognized cause of failure, and it is a serious one, as it is most difficult to rectify afterward. By performing the operation before the patients are reduced by suffering and starvation better results may be hoped for, and the mortality in the hands of operators familiar with abdominal surgery will probably not be greater than five per cent.

A Simplified Operation for Hernia in Children.

Herring (Intercolonial Medical Journal of Australasia) describes an operation for hernia in children which he has devised in accordance with Russell's theory that the presence of the sac is the cause of the hernia, and that the mere excision of the sac in children will result in a permanent cure. Herring calls attention to the fact that the chief difficulty in a hernia operation is the separation of the sac. This is obviated by his method of operating, which is as follows: The incision is made into the sac in the usual position, the contents reduced, and the sac pulled down. The incision in the sac is extended up to the margin of the ring and the upper part of the sac turned inside out, exposing the peritoneal coat, which alone is cut transversely across. As the proximal end edge will retract within the abdomen unless controlled it should be caught in forceps as it is severed. After the peritoneal coat has been separated the proximal part should be closed with catgut and allowed to retract within the abdomen. The wound is closed with subcuticular stitches and sealed. The operation can be done in a few minutes. The ring need not be sutured unless it is large and lax or the patient has a cough. The contents of the inguinal canal are not disturbed. No vessels are cut, so no ligatures are needed. The chances of sepsis are very small.

Membranous Colitis.

White in The London Medical Lancet makes a study of sixty cases of this condition. Fifty-one cases were women; none were men. In only one instance was the patient younger than twenty years of age. This disease usually shows itself between the ages of twenty and thirty years, and is only infrequently found to begin over the age of forty-five years. Very rarely, if ever, does it cause death of itself. In none of these 60 cases could death be attributed to the disease per se. Excluding eight patients who died from other causes and eight others who could not be subsequently traced, of the remaining 43, 21 got well; 16 did not, and 6 improved much. Age does not ap-

pear to influence the severity of the disease, but it is of importance to note that many of these patients who did not recover had had the disease for a long time when first seen. The character of the mucus depends upon how soon it is discharged after its formation. If passed early it appears as glairy masses, like white of egg, not having had time to form shreds or a membrane. Histologically the membranes are structureless, and imbedded in them are various intestinal debris. The fecal matter often consists of scybolous masses, but in some diarrhea alternates with constipation, and then a stool may consist entirely of liquid feces, mucus, membranes and blood. Some patients pass intestinal sand, which most frequently is of a dull red color, though in some instances it is white or light brown with dark patches intermingled. Chemically, the sand is composed chiefly of calcium phosphate and oxalate combined with varying quantities of organic material, which is believed to be cholalic acid. In severe instances there is much abdominal pain. This is of two kinds, a dull constant pain, or in addition severe paroxysms felt chiefly in the center of the abdomen. These paroxysms are often associated with a desire to defecate, which, if done, gives relief. Most patients have a white furred tongue, and suffer from flatulence and anorexia. A certain number of patients owe their membranous colitis to organic disease, e.g., malignant disease and appendicitis, and occasionally it is associated with enteroptosis. Twenty one out of the fifty one female patients had some disorder of the organs of generation. Five of these patients had membranous dysmenorrhea. The association with appendicitis seems to be of two types: First, the appendicitis inducing the colitis, and second, the appendicitis being only an appendical implication by this same membranous disease. The disease is generally met with in neurasthenics, and may exist without any structural evidence of enteritis. By far the most important part of the treatment is to keep the large bowel empty. The simplest way to do this is by aperients. Should this method fail, colon irrigation may be substituted. In exceptional cases right-sided colostomy may be advised. Some patients derive benefit from the application through the abdomen of high-frequency currents. Ordinary plain simple food is the best diet. Intestinal antiseptics are worse than useless. For diarrhea castor oil is the best remedy. Bad cases should be confined to bed, and all patients should be warmly clad, especially round the abdomen.

Errors In Diagnosis.

Bradford (Brit. Med. Journal) considers first those arising from the mistakes in the interpretation of symptoms. Fatal cases of angina pectoris associated with extensive fatty degeneration of the heart are often overlooked and the pain attributed to myalgia. The occurrence of vomiting is often of great importance; cases of cerebral hemorrhage ushered in by vomiting are often looked upon as a mere dyspepsia. A symptom that is often overlooked is the occurrence of retention of urine in local or general peritonitis which is running a latent course. A far more important cause of error in diagnosis is the very frequent presence of serious organic disease without the occurrence of symptoms of sufficient intensity to attract notice. General suppurative peritonitis, dependent even on perforation, may be present without the cardinal symptoms—pain and vomiting. Cerebral tumor, abscess of the brain, and cerebral aneurism may all reach a high degree of development without the presence of any noticeable symptoms. Pleural effusion is especially apt to run a latent course—one whole side of the chest may be full without symptoms. Gastric ulcer, cirrhosis of the liver, tuberculosis peritonitis, and renal disease are also instances of serious organic disease liable to run a symptomless course. The most important source of error with regard to the interpretation of symptoms arises from the attribution of acute symptoms to the onset of acute diseases, whereas in a very large number of instances acute symptoms arise in the course of chronic disease. For instance, sudden acute intestinal obstruction occurring in those apparently healthy, is sometimes dependent upon obstruction produced by chronic tuberculous peritonitis. Sudden paraplegia, simulating an acute transverse myelitis, may occur in chronic and progressive diseases as malignant disease of the spine or aneurism. Mistakes in diagnosis arise not only from want of examination, but also from the want of repeated examination. The latter is necessary because in organic disease the signs are sometimes transitory, or at any rate, not persistent. The physical signs of disseminated sclerosis—the ankle colonus, the diplopia, and even the hemiplegia are often variable and transient in their occurrence.

The erroneous interpretation of physical signs is another very common source of error; this applies especially to the chest. Mimicry of organic by functional disease often leads to mistakes, as in functional and hysterical palsies on the one hand, and in disseminated sclerosis on the other. In another group of cases an inflammatory mischief in the chest stimulates acute abdominal affections, such as peritonitis. Another potent cause of error in diagnosis arises from the fact that many common diseases

are apt to exist in anomalous form. Some errors are dependent on treatment; the too ready administration of morphine often hides the signs of abdominal disease; meningitis may be erroneously diagnosticated in phthisis where the trouble is due to atropine given to relieve cough. Alcohol may be pushed to such an extent as to produce coma, which may be regarded as dependent on the underlying disease.

Hemophilia in Women.

Bovis (Semaine Medicale) says that in 150 hemophiliac patients excessive post-partum hemorrhage occurred sixty-nine times. In two mothers it seemed that nursing increased the flow and the babies had finally to be put on artificial food. There seems to exist a tendency of abortion. In some cases the hemophilia exists in a rudimentary form, and becomes manifest during childbirth. The menstrual history may suggest the probability of such a complication of labor. During the year 1903 there occurred 476 deliveries in his practice. In 153 cases the record showed a menstruation of more than five days' duration; in 323 of less than five days. It seems noteworthy that excessive post-partum hemorrhage was observed in 13 per cent. of the first, and only in 8 per cent. of the latter group. This hemophiliac tendency may manifest itself suddenly, not only during labor but also at the beginning of puberty and the menopause. The author quotes a number of very instructive cases reported by De Lee, Ahlfeld, Switalski and others in which, without warning, fatal hemorrhages occurred during labor, or during a curettment performed soon after labor.

He says marriage should be strictly forbidden in the families of bleeders, both to the men and the women.

He takes up the question of therapy of hemophilia. Since there always is a pronounced nervous element in this condition one must not be surprised by records of wonderful cures by means like "drinking all the champaign the patient wants." The main reliance rests in local applications. The author uses hot irrigations, washing with adrenalin solution and packing, possibly with gelatinized dressings. Steam cauterization may be tried, and if all these efforts fail the hemorrhage must be stilled by clamping, or ligation of the blood vessels, and as a last resort, by extirpation of the bleeding organ, if possible. In considering operations upon hemophiliacs, the writer emphasizes the interesting observation, that they always tolerate operations on the large arterial trunks better than superficial wounds.

The Menstrual Fever of Tuberculous Women.

Franck (Berl. klin. Wochenschr.) says that in March of this year Sabourin and, somewhat later, Krauss pointed out that women affected with tuberculosis, but in whom there was no fever, showed a constant elevation of temperature during the menstrual period. The rise in temperature is occasionally considerable, so that the patients themselves are aware of it, but is usually less than a degree. Often its onset precedes the beginning of the menses. Franck, as the result of observations based upon a great number of cases, extending over several years, confirms this statement. He finds that such elevations of temperature can most certainly be recognized if taken per rectum. The only source of error consists in the presence of chronic pelvic inflammation. Here, too, there is a rise of temperature during the menses, especially per rectum. If, however, this complication can be excluded, a menstrual fever is extremely significant. It is too early to maintain that this phenomenon is absolutely pathognomonic of tuberculosis. Nevertheless, the observations already made indicate that in the presence of other signs it forms a valuable bit of confirmatory evidence, and that even if all other indications of tuberculosis are absent, it should excite the suspicions of the observer.

The Treatment of Intussusception.

Clubbe (Australian Medical Gazette) says that irrigation is useful in all cases, even in those which one does not expect to reduce by this method. Irrigation will cure only a portion of the cases. The child should be put under an anesthetic, and the injection given and the fluid allowed to run out; if the tumor is still present operation should be done. Food should be withheld after the diagnosis is made until operation is performed. The site of the incision depends largely upon the position of the mass in the abdomen. If possible the coils of intestine should be kept in the abdomen, but it is useless to waste time trying to restrain them. When the mass is brought outside of the abdomen for the purpose of reduction it will be found that it will be necessary to replace it if it is in the descending colon in order to get it to pass the splenic or the hepatic flexure.

The reduction of an intussusception is always accomplished by squeezing from below upward, not by pulling upon the entering bowel. The reduction is usually easy until the mass returns as far as the cæcum; there it often stops. The attempt at reduction is not readily given up because the alternative, which is resection, is fraught with much danger. Sometimes the manipulation en-

genders such severe shock that the child will not rally. The cases which resist persevering efforts are few in number. The appendix is nearly always maroon-colored from the pressure exerted upon it; but unless it is black or has lost its polish it should be let alone. Gangrene of the gut is very rare. Any tears in the serous coat should be mended with fine catgut, the bowel washed with normal saline solution and returned to the abdominal cavity. The abdomen is closed in layers by catgut or by through-and-through sutures of silk-wormgut. These sutures should be left in ten to fourteen days.

Travels in Ancient Babylon.

In a paper on some recent researches in Babylon by Doctor Peters, of New York, (The Journal of Inebriety) occurs the following significant statement.

Referring to the statement that the spies came into a barlot's house and lodged there at Jericho, he makes the following explanation:

"Turning to the code of Hammur Abi, we find that the laws 111 dealt with the wine seller. The gender of the wine seller in these laws is always feminine. It is evident that the trade was in the hands of women. It is also evident from these laws that the places where wine was sold were places of resort and lodging houses for the traveler. Perhaps a tavern keeper would be a more exact rendering of the word used than wine seller. It is farther evident from the terms of this legislation that outlaws and bad characters were apt to collect in these taverns, and that they were places of doubtful resort.

A priestess was forbidden to enter a tavern for a drink, or to become a mistress of a tavern. This throws light on the character of this place to which the spies went in Jericho, and on the position of Rahab. They went to the tavern because it was the only place to which one could go, as a stranger in the town.

Rahab was a keeper of the tavern. This and other evidence show that the hotel business in Palestine was of disreputable character. A Jewish ritual prohibits the marriage of a priest with a women connected with the business of keeping a tavern."

The code which Doctor Peters referred to was only recently discovered, and is the most ancient of all codes in the world.

Physical Treatment in Heart Lesions with Failing Compensation.

Raymond Crawfurd (The London Practitioner) states that massage often brings about good results.

Its action on the skeletal muscles is identical with that of digitalis on the cardiac muscle, that is to say, it helps mechanically to empty the overloaded veins, and at the same time, flushes the ill-filled arterioles with blood. The use of systematic muscular exercise completes the parallel, for by this means each muscle-bundle becomes a miniature heart, which compresses the vessels, as it contracts, and fills them, as it relaxes. That form of muscular exercise will be best which applies this principle most widely. This is one reason why Oertel's system of hill-climbing, admirable so far as it goes, but not extending to the muscles of all the body, has given place to the systematized exercises of Schott and Ling. Over and above the applicability to all the muscles of the body, another important consideration is the exact adaptation to the physical capability of the individual, as it varies from day to day. Schott endeavors to meet this by the employment of graduated resistance. The same advantages attach to the ingenious apparatus of the Zander institutes.

Whatever the method, it is obvious that the opening up of a multitude of fresh vascular channels will afford a large measure of relief to an overburdened heart.

It is in mitral regurgitation, with failing compensation of all diseased conditions of the heart, that baths are likely to do good, and those of Nauheim may be taken as the type. Without claiming for them the extravagant effects asserted by some, no one who has used, or seen them used, can reasonably doubt their efficacy in some instances. Initial slowing of the heart is brought about. It is difficult to see to what to assign this, unless to stimulation of the cardio-inhibitory centre reflexly from the cutaneous nerve endings by the action of carbonic acid gas, for the same effect was not produced by the Wiesbaden waters, which differ mainly in the absence of free carbonic acid gas. Later there sets in an abiding dilatation of the cutaneous capillaries, with disappearance of the initial slowing of the heart. The former feature, though in a less degree, was appreciable with the Wiesbaden baths, so that presumably it may be referred to the action of both sodium chloride and carbonic acid gas. At the same time, one must not lose sight of the stimulation of the nervous system, and the deepening of respiration, that result from a bath. It is easy to see how these combined effects would lead to a strengthening of systole, and to a diminution in size of the heart over and above the apparent diminution due to fuller expansion of the lungs.

The Prevention of Apoplexy.

Allbutt (Bristol Medico-Chirurgical Journal) says that in many cases of sanguineous apoplexy, the kidneys are not granular. Some of these cases may present fibrous

changes in the kidneys, which are not, however, such as characterize Bright's disease. He is inclined to rule out the "Brightian class" of kidney lesion, with relation to apoplexy. Why, the writer asks, have the arteries burst in apoplexy when the kidneys are healthy? The arteries may be the seat of atheromatous or sclerotic change; but, although diseased, they have not silted up, as in cases of Bright's disease, but have burst. Arteries give way, not only to the mean pressure of age but further to the mean pressure of a reluctant peripheral circulation; they give way in consequence of the accumulation of "obscure stresses," which might be averted, if we knew how. The obstruction must be due either to a narrowing of the calibre of the arteries or stream bed over a very extensive area, or to an increased friction of the blood itself. If, states Allbutt, we are in the dark as regards the mechanism of persistent rise of the arterial tension, there is fortunately less doubt as to the treatment of the condition. A patient can be saved from apoplexy only by long anticipation. A tendency to hypertension runs in families; hence vigilance must be exerted with regard to members of such families. However, this condition is much more underspread than this. It may be met with even in children and young people. In them the arteries may be thickened, but rather in the muscular coats than in the intima; and this hypertrophy may disappear just as does a cardiac hypertrophy when exceptional strain has been removed. Arterio-sclerosis as distinguished from the sclerotic decay of senile involution is not the cause, but the result, of rising arterial pressure. Hence prevention lies in detecting a special tendency to a persistent mean rise of pressue. Occasional rises occur in all people, but they disappear before they do damage. The rise may be persistent and very marked, but if recognized early, this tendency may be reduced and kept down. Wherefore, every adult of forty and upward should have his blood-pressures measured, say every five years, up to sixty, when, if there is no great increase of pressure, apoplexy need not be feared. In some cases of rising tension without Bright's disease, arterial pasm is manifest, but in perhaps the majosrity of such cases it is not. In some the "large, lax and leathery" artery is present, in others the "wiry" vessel. The first kind may be regarded as arterial tension, the effects of tension being very manifest in the consequent tortuosity of the vessels. In the walls of the wiry vessels this stretching effect is less marked, but this condition is far more difficult to reduce. There is, however, no difference in treatment between the leathery and the wiry groups; yet the latter is far less submissive to deobstruent treatment than the former. Neither does Allbutt treat burly, red-faced patients differently from the spare and pallid. He finds pallor and wiry vessels to be more frequent among the sedentary. Over-eating must be avoided, where there is persistent rise of mean pressures the mode of life must be revised. Regulated exercise, abstinence from alcohol and a great reduction in food all are necessary. Certain spas—Herrongate, Carlsbad and Marienbad, may be visited if possible. Different people respond variously to treatment. In some reduction is difficult; in others a couple of seasons at a bath, with restricted diet and regulated exercise, will obviate danger, at least, for a time; in others, despite all treatment, the rise of pressure, although set back, returns again and again. In these latter cases apoplexy is pretty certain to occur in the end. The systematic bloodletting of former times was a rough-and-ready mode of treatment of morbid rise in blood pressure. Vasodilator treatment is unsatisfactory; it is the cause of the abnormal rise of pressure that requires to be treated. But vasodilators may be of use at certain moments. On the occurrence of a slight apoplexy, all these measures must be carried out with greater rigor. The importance of determining the blood pressure in middle-aged persons is emphasized. Instruments should be used; even the most cultivated touch cannot be trusted. One may thus detect the first stages of that process which finally ends in apoplexy.

Pathogenesis of Icterus.

Abramow (Virchow's Archiv) has applied special staining methods which have enabled him to trace the course of the finer bile capillaries in the liver in various pathological processes accompanied with jaundice. Normally, the epithelium of the capillaries is soon replaced by a mere cuticle border. The capillary itself courses in the axis of the acinus and constantly anastomoses with neighboring capillaries. Small branches are given off throughout the entire interacinous course, which enter the cells and often end blindly near the nucleus. Wherever the flow of the bile is impeded owing to the presence of a stone or a tumor involving the biliary ducts, extreme dilatation of these blind ends will occur so that they extend to the vascular border of the cell. Eventually rupture takes place, so that the bile has free access to the perivascular, lymphatic spaces. It has been found, however, that an obstructive jaundice is also possible if the thoracic duct is ligated; this is explained by the fact that the dilated capillaries will exert pressure upon the accompanying blood vessels and erode their

walls. The icterus of cirrhosis of the liver is due to compression of the finer bile-capillaries by connective tissue while the icterus of heart disease is partly explained by connective tissue, partly by the formation of thrombi of inspissated bile, which impede the flow downward. In destructive processes in the liver, such as accompany tumors, it is evident that the walls of the bile capillaries may be eroded and that the bile may find free access to the perivascular spaces. Lastly, jaundice may be a symptom of pure functional disturbance of the liver, as in infectious diseases and in icterus neonatorum. In these cases it is likely that the cells themselves are at fault and that there is an increased production of bile with possibly a diminished pressure in the capillaries.

On the Urine Separator of Luys.

Caird (Scottish Medical and Surgical Journal) emphasizes the value of this instrument in various cases of obscure renal trouble. Luys has also shown its value in solving obscure diagnoses in the case of lumbar and other swellings of doubtful origin. This instrument is more easy to manipulate than the cystoscope. The method is within the power of the skilled physician, and may entirely replace the difficult catheterization of the ureters. The instrument should be sterilized immediately before use by plunging it into boiling water for five minutes. Soda will damage the rubber. The patient should assume the horizontal position and the urine is drawn off with a soft rubber catheter. The bladder is then washed out with warm sterile boric solution till it returns clear. No air must be allowed to enter, Thirty to forty grammes of the boric lotion are left in the bladder. There is little pain or difficulty in the passage of the instrument in the case of women. There may be some pain in the insertion of the instrument into the male urethra. If there is the slightest resistance the separator should be withdrawn and the urethra gently dilated with Hegar's bougies. In the process of the introduction of the instrument it may be helpful to place a finger in the rectum or vagina. When tne fluid has escaped by the catheters, the patient is raised into a sitting posture on the edge of the table, the thighs being separated and the feet and back supported. The diaphragm is then raised and the contracting bladder grasps the instrument. The urine can then be collected. The diaphragm is lowered by reversing the screw and the instrument is withdrawn. After the patient's bladder is washed out with boric lotion he is sent to bed.

Climacteric Hemorrhage.

Barbour (Journ. of Obstet. and Gyn. of Brit. Empire) reports an interesting case of climacteric hemorrhage due to sclerosis of the uterine vessels in a woman aged forty-six years. Hysterectomy was performed and the microscopical findings of the extirpated uterus are described in detail.

Barbour distinguishes three groups of cases that fall under this head:

(1) Cases of arteriosclerosis, usually in women advanced in life, with hemorrhages and other marked naked eye changes in the uterine wall, but no external bleeding of consequence. This condition has been termed apoplexia uteri.

(2) Cases of uterine hemorrhage, so severe as to call for hysterectomy, of which no pathological account is given, or nothing was found to account for the bleeding.

(3) Cases of severe hemorrhage calling for hysterectomy in which arteriosclerosis was the prominent lesion. While other minor changes in the mucosa are present, such as small-celled infiltration, there is no evidence of hemorrhage or infractions, such as characterize the first group.

Concerning the First Stages of Labor.

Stevenson (Scottish Medical and Surgical Journal) says a prolonged first stage is more frequently due to unfavorable mechanism than to rigidity of the os. The size of the os is not the sole criterion of progress in the first stage. Along with the inner ring must be taken an outer ring, the vaginal attachment; the relative condition as to dilatation of both must be noted. The dilatation of the outer ring is mainly dependent upon the peripheral force, that of the inner ring upon the wedge action. The outer ring may be fully dilated before the inner ring has begun to open; defective dilatation may be the cause of delay in dilatation of the os.

The fetus is the predominant factor throughout labor; the presenting part exerts an influence on the first stage.

A moderate amount of liquor amnii is more favorable than when considerable, relatively to the bulk of the fetus. It is more favorable when the quantity permits of an early combination of direct pressure with the action of the amniotic fluid. An excess, liable to retard progress, begins when the fetal body is entirely surrounded by the waters; and defective action is greater the larger the quantity.

Until the head is born dilatation and propulsion are effected simultaneously by elongation of the fetal ovoid, not by pressure on the breech. Dorsal extension is an important factor in the mechanism. Whatever hinders this action renders the process less facile; this may be an excess of fluid, but

also it may be the position of the fetus.

The head is an efficient dilator even in the first stage; but till the outer and inner rings are sufficiently dilated to admit of the head engaging them, there is a decided advantage in retention of the fore-waters. After the os is half-way dilated, unnecessary delay may arise from integrity of the membranes.

Diaphragmatic Grooves on the Liver.

Moody (Johns Hopkins Hospital Bulletin) says that diaphragmatic grooves are found in the fetus as early as seven months in infancy, in youth, and in old age.

The grooves may or may not contain folds of the diaphragm; the latter are sometimes permanent, and sometimes disappear when the liver and diaphragm are removed from the body.

The comparatively small number of cases recorded does not justify definite generalizations concerning the frequency of these grooves and the age and sex of subjects in which they are most often found.

Many factors take part in the production of the grooves, some of which may be congenital conditions of the diaphragm, difficult respiration, constriction of the thorax and abdomen by clothing, severe diaphragmatic pleurisy, localized peritonitis, and a disproportionate ratio between the size of the liver and of the abdominal cavity.

Intravenous Injections of Iodoform in Pulmonary Tuberculosis.

Dewar, in The London Medical Lancet, says that owing to the improvement in modern apparatus it is possible to perform several hundred intravenous injections on one patient if such a procedure were necessary. The writer mentions his former publications on this subject, and says that there are now patients who have remained well after treatment had been suspended for periods of between two and three years. Up to the present he has not had a fatal case, and even in the hopeless cases, as a result of the injections, the disease has been retarded and the symptoms relieved. Dewar anticipated that in early cases he might yet be in a position to claim that iodoform given by this method is almost a specific. The writer offered several suggestions as to how the drug has such remarkable power: (1) It might act as its own molecule in a germicidal character. (2) If not acting directly as a germicide, as understood in antiseptics, it might excite the micro- and macrophages of Metchnikoff, aiding their phagocytosis. If weak germicidally, it is probably also comparatively harmless to living cells. It might even be beneficial to and absorbable by them, thereby conferring an increased vitality and fighting power. (3) The iodoform might undergo decomposition either by oxidation or reduction, resulting in the production of nascent formaldehyde (CH_2O) and nascent free iodine. The peculiarity of iodine in the chemistry of organic iodo-substitution bodies is well known, for when treated with hydriodic acid free iodine is liberated and hydrogen takes the place of iodine, thus regenerating the normal hydrogen body. Thus free iodine is capable of pr ducing new organic iodo-substitution compounds with other bodies from which iodine could again be liberated; the iodine is thus alternately combined and free and might be used over and over again. This free iodine might act germicidally at the seat of disease or it might form some organic iodo-substitution compounds, themselves possessed of germicidal qualities, in this instance again augmenting the resisting power of Metchnikoff's macro- and microphages in the phagocytosis. Again, if by either of these processes free iodine is liberated the action of iodine in weak alkaline solutions might take place. It forms iodides and iodates, which, being acidulated, would again liberate free iodine.

Hygiene and Intellectual Education of Girls.

Carmichael (Scottish Medical and Surgical Journal) says that the education of girls should include home as well as school training. This can only be attained if the mothers in their girlhood have learned at school the elementary laws of health, which they will carry out during motherhood. To in sure this, evening lectures or classes should be instituted for mothers, in connection with board and other schools.

Hygienic training of girls should be considered of first importance; intellectual training is of secondary consequence, and strictly regulated in accordance with the age and physical health of the pupils.

The majority of girls should not have more than three or four hours intellectual work during each day, and for the whole period of school life. The minority, or those girls who aspire to the higher education, should not commence such studies before the age of sixteen at soonest.

All girls should be instructed during the last year of their school curriculum in elementary physiology and hygiene, in order that when they become wives and mothers they may have an intelligent appreciation of the proper principles necessary for the rearing of healthy children.

A Supernumerary Tooth in the Nose.

Kahler, in The London Medical Lancet, describes a case of a man aged twenty-nine years, who complained of difficulty in breathing through the nose. Several years ago the patient had a plastic operation for

a defect of the lower part of the nose performed at a surgical clinic. It appeared that he had had a nasal gumma when a child, and this had destroyed a great part of his nose, which now presented the saddle shape seen in syphilitic subjects. Anterior rhinoscopy revealed a total absence of the septum nasi and the inferior turbinated bones on both sides. A hard white substance was seen lying embedded in the floor of the nasal cavity, about three-quarters of an inch into the cavity. After careful cleansing it was recognized to be the crown of a tooth. Examination of the alveolar processes showed that all sixteen teeth, or at least their broken and carious roots, were present, so that the nasal tooth was a supernumerary one. The extraction of this tooth was very difficult. Tooth forceps could not be used on account of the narrowness of the introitus nasi, which was rendered still more narrow and rigid by the cicatricial tissue. He succeeded in loosening it by means of an elevator, but the patient suddenly jerked his head, and the tooth disappeared into the esophagus and stomach, but was passed from the bowels after the lapse of three days, during which plenty of potatoes and bread had been eaten. It was found to be most likely a canine tooth. In nearly all the recorded cases such anomalous teeth have been associated with congenital syphilis, which perhaps by disturbing the normal ossification favors displacement of the dental germs. This dental anomaly was first recognized by the famous poet Goethe, who was also a very observant man of science, and who mentioned a case of the kind in his "Journey to Switzerland in 1797," when he was studying the premaxilla.

Single Kidney: Ureter Passing to Opposite Side.

Horand (British Medical Journal) found in necropsy that the right kidney was entirely wanting, nor was there any trace of a right renal artery or vein. The left kidney was in normal position, hypertrophied and lobulated. The left renal vessels showed no anomaly. The pelvis of this single kidney passed into a ureter of large caliber, which ran downward toward the right, passing in front of the left common iliac artery, much posterior to the left sacroiliac synchondrosis, and sweeping around the inner wall of the bony pelvis on the right side internal to the vessels. Finally it passed through the walls of the bladder opening on the right side at the normal level of the right ureteral orifice. A left orifice was detected; it was permeable and passed into a rudimentary left ureter. This canal ended in a thin filament at the point on the brim of the pelvis where the normal left ureter passes downward; it was totally disconnected from the left kidney. The left vesicula seminalis was absent, but the left vas epididymis and testis showed no abnormality. The left suprarenal capsule was well developed; the right was detected greatly atrophied and flattened against the right side of the vertebral column; it possessed a small capsular artery and vein. He observes that the surgeon might be badly puzzled in examining a patient with renal disease if an anomaly of this class existed. The cystoscope would show urine issuing from the right ureteral orifice, whilst the left, apparently normal, gave passage to none. The symptoms might justify nephrectomy, but in such a case the surgeon might remove the left kidney under the false impression that its fellow existed and was normal.

Investigations into the Causes of Eclampsia.

Zweifel (Archiv. f. Gyn.) has made chemical examinations of the nitrogenous combination in the urine of eclamptic women and compared the results with the same substances from normal kidneys. As a result he states that there seems to be no doubt that in eclampsia there is an increase of ammonia salts in the urine, which indicate an abnormal amount of acid in the blood. There is a reduction of the fully oxidized sulphates and an increase of the less oxidized sulphur compounds. From 42 examinations of eclamptic urine he draws the conclusion that there is a great reduction of oxidation of albumin in the body. The author also tested for lactic acid in the urine of eclampsia, with the result that he found it in many cases of this complication. The presence of lactic acid in the urine of men and mammals is always pathological. It appears in various forms of poisoning, such as with curara, strychnia, morphine, amylnitrate, arsenic, phosphorus, etc., as well as in epilepsy and eclampsia. It arises from lessened oxidation and the taking up of acid by the blood corpuscles. The practical considerations that result from these investigations are given thus: Prophylactic measures for the prevention of this suboxidation in pregnancy are of the greatest value. The examination of the urine should be made every two weeks in all cases of pregnancy. As soon as albumin is found, the patient should be put upon a vegetable diet, albumin except in the form of milk being prohibited. When eclampsia has come on all the measures we can use are of little avail. Labor should be induced as soon as convulsions set in, the cervix being artificially dilated as rapidly as possible. For this purpose the writer uses metallic dilators, and when necessary incision of the cervix uteri. When the cervix is not dilatable he uses vaginal Cesarean section with patients

who are in the hospital, in private houses abdominal Cesarean section. The life of the child is generally not endangered by the poisoning of the blood, but only by asphyxia of the mother; hence the life of the child should be preserved whenever possible, and perforation is in order only when the child is known to be dead. Morphine only adds to the poisoning. Operations should be done under chloroform. Venesection and saline infusions are of use, and oxygen may be given, aided by electric stimulation of the vagus. Squills and digitalis are also of use.

Antidiphtheritic Vaccination.

Bandi and Gagnoni (Rivista di Clin. Ped.) have demonstrated the value in the serotherapy of diphtheria of the specific antibactericidal principles, in distinction from the antitoxins, thus reinforcing the prophylactic properties of the serum. It has been demonstrated that it is necessary to introduce, either for cure or prophylaxis, a sufficient amount of specific antibodies to counteract the bacterial poison. This guards against the poison for a limited time only, dependent on the rapidity of elimination with other heterogeneous substances, of the antibodies injected. Elimination begins soon after injection, independently of the amount injected. The authors produced a vaccine to confer immunity by taking cultures on agar, which had been in the thermostat for four days, washing them with chloride of sodium and bicarbonate of sodium, scraping the culture and placing the whole in tubes, in a water bath, for two hours, at 55 degrees C. Injections into animals are made, to determine its sterility, and it is allowed to stand for two days. The liquid is decanted, leaving the dead bacteria at the bottom. In this fluid are a large amount of endocellular poisons. With this animals are immunized. This produces an antitoxic immunity. It contains products of the metabolism of the germs, toxic products which have the toxiphoric properties destroyed by heat, and the haptophoric properties preserved, which stimulates the groups of cells to the formation of antitoxin. The authors have injected this vaccine in fourteen cases, pure in seven instances, in the rest, as is done in peste, with a certain amount of bivalent antidiphtheritic serum. The result of these injections proves that we can obtain in man an antibacterial and antitoxic immunity against diphtheria by injecting from one to two cubic centimeters of antidiphtheritic vaccine, without any reaction occurring. Most of the cases injected were convalescent from infectious diseases, and were debilitated. The grade of immunity is not in proportion to the reaction produced, but to the amount of vaccine injected. A revaccination reinforces the immunity. It now remains to determine how long this immunity lasts.

Nystagmus in Children.

Stephenson, in the British Journal of Childrens Diseases, discusses three causes of nystagmus which he declares are collectively commoner in children than all the other causes put together. These are, gyrospasm, partial albinism, and post-meningitic or hydrocephalic influences. The recent onset of the affection which is often unilateral, the peculiarities of the nystagmus—a quivering, rolling, twitching, or "twittering" movement of the eyes—and the age of the child, generally from six to eighteen months, should suggest that this is an instance of "gyrospasm," "head nodding," spasmus nutans." These children show signs of rickets. These cases are commoner in winter than in other seasons of the year. This fact is considered to be in some way connected with the absence of sunshine. It is doubtful what relation exists between this disease and dentition. These children are often intelligent beyond the average and very good tempered. Sudden noise is apt to startle them. Temporary lapses into unconsciousness may be present. The affection may be present in the other children of the family. The disease always gets well after a few months, with or without treatment. Antipyrin in one-grain doses, two to four times a day, is the best drug to give. Bromides have also been recommended. The writer next calls attention to the light hair and eyelashes, the glowing pupils, the pink iris, the nystagmus, the photophobia, the defective sight of the typical albino. He has recently observed an interesting group of cases in which imperfect sight and nystagmus coincide with much slighter signs of albinism. This condition is apt to run in families and is apt to affect the males. The tendency is transmitted by the females. The essential nature of this condition is often overlooked or misinterpreted. The last type, that of post-meningitic and hydrocephalic nystagmus, offers no special peculiarities. Its nature can usually be recognized from the history of the case.

Inebriety and the So-Called Cures.

James Stewart, in the Bristol Medico-Chirurgical Journal, suggests that the following statements, founded on observations extending over many years of clinical work, might with advantage be put before an intelligent inquirer into the value of these so-called "cures" of inebriety:—(1) The nervous system varies considerably in different individuals. In some cases the brain is much more susceptible to the poisonous effects of alcohol than in others. For example,

the neurotic will be affected prejudicially by a comparatively small quantity of spirits which might be taken—aye, even double as much—with almost entire impunity by his neighbor of a different type. (2) Alcohol has an especial affinity for the "memory centre" and the "will centre" of the brain. When either or both of these become deranged—but not till then—the case may be pronounced to be one of inebriety. (3) In the inebriate the cells of these centres are physically injured. An organic lesion has been established. Till other cells have been requisitioned, so to speak, to take the place of those that have been deranged, the functions previously exercised through the latter must remain in abeyance. (4) The process is a very slow one—this taking up of new work by a set of cells not previously so employed. It cannot be hurried. Gold will not expedite the process, nor apomorphin, nor any drug with which we are acquainted. The restoration of healthy function has never been known by the writer during an experience of over twenty years at Dunmurry to be accomplished in a single case in less than a twelvemonth. An official document issued by the Home Secretary in 1899 stated that there was a consensus of opinion among medical men that, in order to give a chance of effective operation to even the best designed method of treatment, a considerable period of residence in a "home" was required. The treatment "cannot be successfully carried through under eighteen months to two years even in favorable cases." (5) Hypnotism, the injection of apomorphin or other drug (according to "Dr. Topsy's" or any other method) may arrest the drunkard in his downward course of vice. It will not do anything towards the re-building of injured brain tissue. (6) The inebriate must for at least twelve months be placed in such surroundings as experience shows are favorable for the carrying out of the work of restoration of the injured brain cells—a work which must not be interrupted, and which cannot go on if alcohol in any quantity, even the smallest, be taken by the patient. The protection of the patient can be secured only in a properly organized "home." (7) Forty-one per cent. of the cases of both sexes treated at the Dunmurry Home during the last ten years had previously been under the care of "Dr. Topsy" or some other lightning curer of inebriety. In every one of these cases, without exception, the patient said the benefit was only temporary, the duration of the immunity depending on (a) the occupation or surroundings of the patient after the so-called "cure" had been effected, and (b) the condition of the general health. All looked upon the expenditure on the "cure" as waste of both time and money.

Case of Enlargement of the Spleen and Liver in a Child.

Steven (Glasgow Medical Journal) reports the case of a child of two years which had been listless and fretful for eight months. Four months later the abdomen became enlarged. She vomited occasionally. One brother died at seven years of age after three years of vomiting and splenic enlargement. On examination the spleen was found to extend into the pelvis. The liver was also enlarged. The author thinks this may be a case of Banti's disease.

Innominate Aneurism—Simultaneous Ligature of the Right Carotid and the Right Subclavian Artery: Recovery.

Dunn (British Medical Journal) reports the case of a man aged forty, who had contracted syphilis in 1886. By 1904 he had developed unmistakable symptoms and physical signs of aneurism of the innominate artery. As the tumor was already quite large and daily growing larger it was decided to operate. The case had refused to respond to Tufnell's treatment. The right common carotid artery was ligatured above the omohyoid muscle, and the subclavian artery in its third part. The operative wounds healed well. Immediately after ligation a decided diminution in the size of the sac took place. Fifty-one days after the operation the portion of the sac in the episternal notch was consolidated and felt firm to the touch, although a faint pulsation was still felt. A month later he was recommended for light employment. Shortly afterward he was able to walk a mile and a half each way daily to his work without dyspnea, and to follow his occupation of cleaning tools at the bench without inconvenience of any sort except slight fatigue of the right arm and shoulder. A small tumor, firm and but slightly expansile, and paralysis of the right vocal cord still persist. No temporal pulse is palpable, although a slight radial pulse can be felt. There is slight weakness and coldness of the right arm.

Tuberculin in Tuberculosis.

Anderson (British Journal of Dermatology) makes an earnest plea for more general and wide-spread use of old tuberculin (Koch) as a diagnostic and curative agent in tuberculosis. He demonstrates its marked positive diaghostic value in a case of peritonitis, a case of general enlarged glands, and an otherwise obscure eruption on the ears, arms and thighs; its negative diagnostic powers in a case resembling lupus, but yielding promptly to antiluetic remedies. Seven additional cases of lupus, some of which failed to improve materially under X-ray and Finsen therapy, were cured

or markedly improved by tuberculin treatment, demonstrated by illustrations. There was marked improvement in a case of Addison's disease resulting from tuberculosis of the adrenals. The initial injection should not be more than 0.25 to 0.5 of a 1 to 1,000 solution, and the second injection should not be larger than the first. There should be several days during which the patient is free from febrile reaction between injections, and the dose gradually increased until 1.0 of pure tuberculin fails to give a reaction.

Diphtheria.

Renney (Pub. Health, London,) gives the history of two outbreaks of that disease, which tends to show that the possible source of infection was the dust from floors, walls, etc. In Sunderland, during the last ten years the average notifications of diphtheria, have been 48.6 per annum, but in the first quarter of the year (1905) fifty-five cases were notified. On investigation, it was found that most of the children attended the Council Schools, nine of the cases having occurred in children from one classroom of the infant department of one of the schools. On March 21st disinfection by formalin vapor and formalin spraying was carried out in this department, and there had only been one other case notified in the department up to May 12th. As that case was notified on March 24th, it had probably been infected prior to disinfection of the department. It had been intended to take swabs from the dust of the floor and from the top of the door prior to disinfection, but disinfection had been performed before the medical officer knew of it. Swabs taken from these situations after disinfection gave negative results. The writer does not "assume that the source of infection was to be found only on the floors, walls, and desks of this classroom," but thinks "it is a very significant fact that since March 21st there has not been another case there." On November 25th, 1904, a boy was admitted to Sunderland Borough Sanatorium suffering from scarlet fever. He had, in addition, a very suspicious throat, and 2,000 units of diphtheria antitoxin were administered, and he was placed for observation in a pavilion by himself. Swabs from his throat showed the presence of the diphtheria bacillus. He made a good recovery, and a month later, as he was still peeling, he was returned to the scarlet fever pavilion, which had just been thoroughly disinfected. On January 22nd, 1905, a nurse, who had been working in the male ward of this pavilion, developed diphtheria. She was removed to the isolation block, and disinfection was again carried out. On January 31st, a boy, who had been admitted into the scarlet fever pavilion on December 22nd (after the pavilion had been disinfected), developed diphtheria. He also was removed, and disinfection of the pavilion was again carried out. On February 6th the diphtheria bacillus was found in the healthy throat of a child in the ward, but no further development then took place. On March 24th diphtheria occurred in another scarlet fever patient admitted on March 9th. He was removed, and the pavilion emptied of the other patients. Swabs were taken from the dust on the top of the door, and also from the crevices in the floor, and diphtheria bacillus was found in both instances. Swabs taken from these positions after thorough disinfection of the pavilion with formalin gave negative results.

He has no doubt from his experience that a certain percentage of scarlet fever patients have diptheria bacillus present in the throat on admission, and although most of them do not develop diphtheria, they yet act as "carriers" to others. He thinks it "a matter for serious consideration whether all scarlet fever patients should not first be admitted into an observation pavilion, where swabs could be taken, and the patient detained until the swabs showed a negative result; they could then be sent to the scarlet fever pavilion."

Scalp Isolation in the Treatment of Ringworm of the Scalp.

Walsh (Brit. Journal of Children's Diseases) says that the following treatment will enable a child suffering from ringworm of the scalp to attend school without danger of infection. The scalp is first shaved, no matter whether there be one patch of ringworm or many; it is then rubbed with turpentine, washed with soap and water, and dressed with a germicide, such as a weak solution of formalin or sulphurous acid. It is then exposed to the X rays for 10 minutes and finally painted with several coats of flexile collodion containing 10 per cent. of salicylic acid. The use of the X-rays is not essential; a mild irritant application may be substituted. In the next few days a fresh coat of collodion is applied, especially if there is any tendency of the collodion cap to crack. If desired, the cap may be strengthened with a coating of rubber solution, with Unna's zinc-gelatin, with a thin layer of cotton wool, or with strips of rubber adhesive plaster. After a week or 10 days the cap is forced up $\frac{1}{8}$ in. by the growth of the hair. It can then be gently stripped off bearing on its under surface the firmly adherent stumps of diseased and healthy hairs. If it cannot be stripped off without causing much pain its removal may be rendered easier by inserting a pair of scissors and snipping some of the hairs. The ringworm hairs are twisted and irregular as

they were on the scalp, and some of them are turned white, presumably by the action of the ether in the collodion. The process may be repeated as often as necessary. An objection to the treatment is that collodion is somewhat costly, but no doubt cheaper substitutes, such as rubber solution, may be found.

Mysophobia.

Punton (Journal of Nervous and Mental Diseases) says:

(1) That the close relation which exists between the so-called neurasthenias and insanity is so very striking as to establish a true equivalency.

(2) That the curability of these insanities largely depends upon the early enforcement of appropriate medical treatment.

(3) That the non-insane psychoses are subject to the same therapeutic laws and principles which apply to the more pronounced forms of incipient insanity.

(4) That their prognosis is in direct ratio to their duration.

(5) That violation either through ignorance, pride or willful neglect of these fundamental essentials is the responsible agent of the rapidly increasing tide of incurable mental disorders.

(6) The inflammatory changes are present in the peripheral vessels as well as in the branches of the anterior spinal artery, though these changes are seldom visible until the vessels enter the gray matter.

(7) The inadequate collateral circulation within the anterior base is favorable for sluggish circulation and embolism.

The Use of Buttermilk in the Gastrointestinal Affections of Infants.

Stooss (Correspondenzblatt fur Schweizer Aerzte) mentions the favorable reports which have appeared, commending buttermilk as a food for infants, and gives details of several cases in which he obtained excellent results. Buttermilk is milk which has been deprived of fat by churning. It contains from 2.5 to 2.7 per cent. of albumin, 0.5 to 1 per cent. of fat, and 3 to 3.5 per cent. of sugar. Its acidity should correspond with 7 cm. of standard soda solution (1-1) (Finkelstein). The method of preparation as suggested by Texeira de Mattos is the following: "A litre of buttermilk has added to it a tablespoonful (15 to 20 grammes) of fine rice flour, or other meal, and is thoroughly mixed. It is then put on a moderate fire and stirring is continued until it boils up three times, or about twenty-five minutes altogether. After this two or three heaping tablespoonfuls (20 to 30 grammes) of cane or beet sugar are added. The vessel and the spoon should not be of metal which is affected by acids, and if enamelled the surface should be smooth and clean." Stooss modifies this by reducing the sugar to 25 grammes. The solution is then put in Soxhlet flasks and again cooked for three minutes. The frequency of feeding depends upon the age. For a four months' child the quantity given was 100 grains each feeding, and this was given six times a day. In a nine months' infant it was increased to 120 grains, older children received more. The good results were immediate and remarkable, especially where the infants had been taking other forms of artificial food, and had been unable to assimilate it. The buttermilk as thus prepared is especially suited to atrophic children, which have been very much reduced by chronic digestive disorders. It is, of course, essential that the greatest care should be observed to obtain the best buttermilk with every precaution against contamination. This food is not to be used in acute catarrhal enterocolitis, or acute exacerbations of chronic intestinal affections. It also is not advisable to begin its use in very much reduced infants suffering with bronchopneumonic foci, purulent discharges from the ears, or skin abscesses. Physicians in individual cases may find it desirable to modify this combination in the proportion of sugar, flour, or by the addition of a little fat (fresh butter); but as the rule it will be advisable to commence with the formula above given.

Extroversion of Bladder.

Newland in The Australian Medical Gazette records a successful case of extraperitoneal implantation of the ureters in extroversion of the bladder which had existed since birth. The patient was 7 years of age. At the age of 3 a plastic operation had twice been unsuccessfully performed. On examination a pyriform area of bright red mucous membrane was to be seen in the pubic region. The stalk lay downward and was formed by the penis, which was in a state of complete epispadias. Above and at the sides the junction of skin and mucous membrane was well defined. The latter showed a scarred condition due to the previous plastic operations. The exposed surface of the bladder ended below in the cleft urethra, in the proximal portion of which the vera montanum could be recognized. A transverse sulcus, due to the folding of the urethral on the vesical mucous membrane, existed. When this was opened out by gently drawing the penis downward, the vera montanum and ureteral orifices were more distinctly exposed. The latter lay at the summits of two papillæ, from which urine gushed forth intermittently, but seldom simultaneously. There was no ulceration of the vesical mucous membrane nor

irritation of the surrounding skin. The cleft prepuce was very large. The scrotum was well developed but bifid. The testicles were incompletely descended. They lay below the external ring and could be pushed into the scrotum. No hernia existed. The pubic bones were widely separated. The gap could be felt distinctly. The inner surface of the thighs, instead of meeting at a narrow angle of the perineum, were separated by a wide interval. The anus was dilated and the rectum washed out with saline solution. The vesical ends of the ureters were then freed according to the method employed by Peters. A No. 3 Jacques catheter was passed into each ureter for about 2 inches and fixed to the urethral papilla, the one with fine silk the other with a fine catgut stitch. A circular incision of as great extent as possible was then made through the mucous membrane around each papilla. This was deepened until the bladder wall was completely cut through. The separation of the ureter from the loose cellular tissue, in which it lay along the wall of the pelvis, was easily effected. Each ureter was exposed for from 1½ to 2 inches. With the left forefinger in the rectum and the right in the suprapubic wound, the anterior and lateral walls of the rectum were defined. A Lister's sinus forceps was passed into the rectum and its fine point thrust through the lateral wall about 1½ inches above the anus. The small wound was dilated by opening the blades of the forceps. The catheter in each ureter was grasped by the sinus forceps and drawn through the wound in the lateral wall of the rectum on the corresponding side. The ureter followed the course of the catheter, the rosette of vesical mucous membrane passing through the wound in the rectum much as a button passes through a buttonhole. The catheter in the left ureter was forthwith removed. The rosette on the right side was not a large one, and it seemed better to leave the catheter in the ureter. The remainder of the vesical mucous membrane was not interfered with. The wound left by the transplantation of the ureters was gently packed with iodoform gauze. The free end of the catheter in the ureter was passed into a bottle containing boracic lotion. The operation, though tedious, was well borne, and the patient did not suffer from shock. Two days after the operation the patient retained his urine from two to three hours during the day, but was troubled with incontinence at night. He gradually acquired more and more control over the flow of urine until at the end of the third month he was able to remain dry all day and only occasionally wet his bed at night. Six months later the remaining mucous membrane of the bladder was dissected away. The raw surface was diminished in size by the insertion of transverse Halstead sutures of catgut. The skin was then freed all around, and extensively undermined. As the skin still could not be sutured across the raw surface without tension, a curved incision, with the convexity upward and outward, was made on each side from the upper limit of the raw surface left by the ablation of the vesical mucous membrane to the groin. The wound, when closed, presented a triradiate appearance. At the same time an attempt was made to close the proximal portion of the urethra. An incision was made along the junction of skin and mucous membrane. A flap of the latter was dissected up on each side and sutured the one to the other. The skin was undermined and sutured over the urethral mucous membrane. The whole wound healed well, with the exception of the small portion lying over the urethra. A month later another attempt was made to establish a urethral canal. On this occasion the penile urethra was treated as well. The mucous membrane was dissected up on each side and sutured. The skin was joined over this. There was considerable tension, and union again failed. Two months later the whole of the urethral mucous membrane was dissected away. An incision was made through the prepuce at its junction with the glans, and it was then stripped from the under surface of the penis. A large flap of skin was thus obtained. It was next buttonholed, and the glans penis passed through the opening. The flap was then sutured along the dorsum of the penis. On this occasion the wound healed well and the patient was able to return home.

Pruritus and Allied Conditions Affecting the Vulva.

McCann in The Clinical Journal says that pruritus is a symptom and not a disease, and one of its most important causes is eczema, though the effects of the latter as a cause and sequence must be distinguished. A common cause of pruritus is smegma, as well as pediculi or other forms of uncleanliness. Such conditions are readily corrected. A common condition associated with pruritus is the presence of tender spots. When they are touched the patient will often say that they are the cause of the pruritus. The best treatment is the application of pure carbolic acid or tincture of iodine to the tender spot. After the use of carbolic acid or the actual cautery a simple ointment should be employed. A large group of cases of pruritus is associated with alterations in the urine due to the presence of sugar or hyperacidity. The latter is a much more frequent cause. Every case of pruritus should have the urine examined. The itch-

ing in diabetes may be very severe. In such cases opium may be employed. It is probable that the dietetic treatment will not greatly influence the pruritus. Locally nothing is better than the sulphuret of potassium, 10 grains to the ounce of simple ointment. This will often cure the pruritus even when the diabetes is not lessened. For a hyperacid urine alkalies should be administered internally, and locally an ointment containing carbonate of bismuth 10 grains to the ounce. The carbonate of bismuth is an excellent preparation in all cases of irritation of the vulva, and it is very useful in cases of urinary fistula. It may be employed in the form of an ointment, paste, or made with glycerin or with castor oil, rubbing up as much bismuth as the castor oil will take up.

Cases of pruritus of the vulva occur in which no local changes can be found, they seeming to depend upon nervous irritation. Every case should be carefully examined, and it will be found those without local changes are decidedly exceptional. The most sensitive area of the vulva is just where it joins the vagina. If this ring of tissue be carefully examined, it will often be found cracked, fissured, or presenting tender spots. In such cases no local applications to the vulva will be of service; they must be applied to the lower part of the vagina. In using carbolic acid, which may be employed in the strength of 1 :20, strips of lint should be saturated having a length of about three inches. These should be introduced into the vaginal orifice, and they may be left over night, such an application often affording the first relief. The local effect of the carbolic acid can be supplemented by daily applications of boracic wool. This gives off a fine powder of boracic acid. The further local treatment consists of the use of bicarbonate of bismuth ointment, which should be made up with lanolin. Cases not relieved by carbolic acid may be improved by an application of chloroform, 1 drachm to 1 ounce of olive oil, applied with a camel's hair brush. Another useful ointment is unguentum conii, to which 30 minims of purified creosote has been added. Local remedies such as sitz baths, to which bicarbonate of potash has been added, are useful. General treatment may be necessary, such as rest and diet, and the patient should not take alcohol. The bromides are sometimes useful as general sedatives. Cases which are not relieved by medical treatment may require surgical intervention. In such cases it may be necessary to excise the mucous membrane of the vulvovaginal munction.

An Aid to Prognosis in Typhoid Fever.

Simon (Brit. Med. Journal) notes the amount of urine passed in the later stages of enteric fever as a guide of the utmost value. Polyuria is a well-known symptom at the end of nearly all febrile disorders, but in connection with typhoid fever it is a very marked and conspicuous condition. Toward the beginning of the fourth week, seldom earlier, sometimes a little later, the urine increases in quantity from about 30 ounces to 60, 80 or even 100 ounces daily. From extended observation it has been found that polyuria occurred not only in every case that was doing well, but also in many cases of great severity in which no general improvement or amelioration of symptoms could be observed. Even in severe cases, if polyuria occurred, the patients all recovered; nor was it necessary in order to estimate the value of polyuria as a means of prognosis that the patient should be in a state to voluntarily empty the bladder. Should absence of polyuria exist in a case supposed to be doing well, the attaching of too much importance to the general improvement is to be deprecated. In no case in which polyuria was noted did perforation occur, and in no case was there hemorrhage of any moment after polyuria was established. Furthermore, the occurrence of relapse is of the most extreme rarity when polyuria has once begun.

A New Operative Procedure for Complete Prolapsus of the Uterus at the Menopause.

Landau (Zent. fur Gyn.) says that after the operations for complete prolapsus of the uterus proposed by Freund, Wertheim and Fritsch, although results are satisfactory in most cases, in some patients operated on at the menopause there still remains the sensation of weight and dragging which was the chief inconvenience before operation. The writer suggests another procedure to be done in cases that have reached the climacteric, which he characterizes as a partial extirpation of the uterus, in which, by fixation of the posterior peritoneum of Douglas's cul-de-sac to the upper portion of the vaginal wall behind the urethra, and the utilization of a portion of the musculature of the uterus, a firm pelvic floor is constructed, which prevents prolapse of the bladder and the contents of the abdomen. This procedure is not accompanied by any technical difficulties, and by the closure of the posterior cul de-sac the extirpation of the greater part of the uterus becomes entirely extraperitoneal, thus rendering the operation entirely without danger. The technique of the operation he describes as follows: After disinfection of the parts, the prolapsed vagina and uterus are drawn forward as far as possible, grasping the vaginal portion of the cervix. A long incision is made in the anterior vaginal wall, beginning close to

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the urethra and extending to within two or three centimeters of the os uteri; the vaginal walls are detached, after incising the anterior lip of the cervix and separating the bladder walls; the plica vesicouterina is opened and the uterus luxated, being sharply anteflexed, so that the peritoneum of the posterior cul-de-sac can be reached, and by means of a suture of silkworm gut which takes in the substance of the uterus, the peritoneum is attached to the anterior vaginal wound, and the uterus is thus placed outside the closed peritoneal cavity. The posterior wall of the corpus uteri and the posterior lip of the cervix are both fixed by these means. The adnexa are removed and the body of the uterus being free, the greater part of that organ is resected with the upper portion of the posterior uterine wall, the lower part being left behind. The fixed point for the incision is the fixed vaginal posterior cul-de-sac. The remaining portion of the vaginal walls and the uterus are united by sutures. A high colpoperineorrhaphy makes a new rectovesical septum, into which the stump of the levator ani is sutured. By means of this muscle and the muscular portion of the uterus left in the wound the pelvic floor is so strengthened that prolapsus of the abdominal contents is prevented.

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Infantile Scorbutus (Barlow's Disease) Cured by Change of Diet.

Comby (Bulletin et memoires de la Societie medicale des hopitaux de Paris) reports two additional cases of infantile scorbutus. In the recent cases, the children, eight and a half months and ten months of age, respectively, had been well cared for, except that they had been fed with sterilized modified milk. In addition to anæmia, loss of flesh, weakness, and diarrhœa, the infants exhibited a sort of painful paraplegia. They also gave evidence of exalted general sensibility, and cried when moved. The younger one had some blood in the bowel discharges (melæna), and a painful swelling around the left ankle. The other had no swelling of joints, but showed distinct signs of rachitis. There were no ecchymoses on the surface of the body in either case, but the younger had them on the gums. In each case, the modified milk was ordered discontinued, and fresh cow's milk, simply boiled, substituted, in doses of 120 grammes every three hours. In addition, a teaspoonful of orange juice was given three times a day. Improvement was manifested within a few days and health was restored in a week. In commenting upon these nine cases, Comby points out that they all occurred in young infants who were fed upon sterilized, modified milk. He has not seen a single case among infants who were only using simply sterilized milk (by Soxhlet's method). In six cases the form of modified mother's milk (Gartner's method) was used; in two, the prepared milk of Val-Breune, and in one, the oxygenated milk, called "Nectar," was employed. The signs of scrobutus did not appear until after several months' use of the modified milk. The majority of the cases also showed signs of rachitis. In eight out of nine, the gums were fungous and showed ecchymoses. The other one had no teeth, although ten months old. In the diagnosis, the painful pseudo-paraplegia, with or without subperiosteal hæmatoma, and the swelling with ecchymoses of the gums, together with the history of feeding on prepared food, are the most important features. The prognosis is favorable, even in the cases that come under treatment late. All the nine cases recovered in from one to four weeks. The treatment consists simply in replacing the sterilized, modified milk by fresh milk, and, for a few days, adding two or three teaspoonfuls of orange juice or of grape juice daily. The juice of meat, which has been recommended, he regards as useless and has not used it.

Practical Remarks on the Narcosis Phase of Choloform Anesthesia, with Illustrative Cases.

McAllum (The Scottish Medical and Surgical Journal) describes this so-called chloroform sleep as a condition in which the stage of surgical anesthesia has not been deoperly reached, but it so nicely simulates the latter that the surgeon is usually allowrd to commence work, and is then startled at seeing his patient wake up, and further manipulation in this condition depends very largely upon the personal factor of the patient as well as the experience of the man who is giving the chloroform, and the latter is very liable to mistake the condition, since it is marked by a small, fixed pupil, the absence of corneal reflexes, and the other signs which are supposed to indicate a perfect state of surgical anesthesia. On the other hand, the pupils may be dilated, there may be shallow respiration and a little cyanosis, and still the patient be by no means under the influence of the drug.

A common cause of the condition is the patient being inspired to take long breaths or blow away the chloroform early in the administration of same. Usually no harm is done if an incision is made before the patient is properly under the anesthetic, but a source of danger is present if especial sensitive parts are involved, and thus cardiac inhibition is brought about. Where the narcosis is profound and all the signs are well marked, it is impossible to stimulate the respiration. Even a deep incision will not do it. In such cases, of course, the operation may be continued just as though the patient were in the proper surgical stage.

A Note on Appendicitis in Children.

Dun (Glasgow Medical Journal) thinks that appendicits is much more frequent in children than is generally understood and that the impression that children are liable to more serious attacks than adults arises from the fact that they do not come to the attention of the surgeon in the mild stages. The usual symptoms are: Abdominal pain, colicky usually referred to the umbilicus; slight right iliac tenderness; nausea, with vomiting; flatulence, tenesmus and diarrhea. In more severe cases there is in addition a rise of temperature, and there is rigidity. Colic and acute indigestion have to be excluded. The stage of peritonitis and abscess formation gives the usual adult symptoms, with the additional complaint of frequent and painful micturition. Rectal examination should be made. A leukocytosis of over 15,000 indicates pus. In the mild cases the patient should be kept in bed on a fluid diet. If the attacks recur it is best to operate. In suppurative cases operation is the rational treatment, and in gangrenous and ruptured cases the only treatment. Opium and purgatives are dangerous and should be avoided.

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Intravenous Injections in the Treatment of Syphilis.

Barthelemy and Levy-Bing (La Syphilis) say that none of the various salts hitherto employed for intravenous injections in syphilis has been found satisfactory; the cyanide was too toxic in its action, the sublimate coagulated albumin and the others were unreliable in their action or unstable compounds. A mercury salt suitable for intravenous injections should possess the following qualities: it must be completely soluble, it must not coagulate albumin, it must not be too toxic, it must be stable in solution, it must contain a fixed and known quantity of mercury, and it must be capable of being readily sterilized. As a result of careful study, the authors found that the biniodide fiulfills all these conditions. It contains 40 per cent. mercury and is easily prepared. They have also employed the cyanide and the sublimate. In their clinical experiments they employed 408 injections in thirty patients. In two they used the oxycyanide, in five the sublimate, in seventeen the sublimate, and in five both the sublimate and the biniodide. All the patients were women suffering with various types of syphilitic lesions. They carefully describe the technic of intravenous injections, which apparently is less difficult than would at first be supposed. Various anatomical situations were chosen. As a rule, however, the veins at the bend of the elbow are best adapted to this small operation. The doses employed were as follows: Oxycyanide, .01 gm.; sublimate, .01 to .02 gm.; biniodide, .1-.02-.03 gm.; dissolved in one c.c. of water. The intravenous injections were invariably painless, but in some cases difficult on account of the veins being concealed in the subcutaneous connective tissue. In a small number of cases unpleasant consequences were noted. Those of a local character were: ecchymoses, subcutaneous edema, the formation of nodosites, periphlebitis, and the formation of scars. The general unpleasant consequences were referable to the toxic action of the mercury, such as salivation, stomatitis and diarrhea. In conclusion, the authors believe that intravenous injections are of service in those cases where it is necessary to obtain a very rapid action, but in which it is necessary to avoid any pain. In other respects the intramuscular injections fulfill all indications and produce the same results.

The Proper Amount of Nourishment in Cases of Infantile Atrophy.

Variot (Annales de Med. et Chir. Inf.) says the suburbs of Paris cases of infantile atrophy are often encountered. This condition is characterized by retarded growth due to gastrointestinal disease. He makes a distinction between infants whose development has been temporarily arrested, who improve when fed on sterilized milk, and the large class of athreptic infants of the Parrot type who have progressed to a state of marantic cachexia always incurable. According to the writer the most exact definition of this morbid syndrome has been furnished by Jezourel in his thesis. The conclusions of the latter are stated thus:

A certain number of breast-fed infants do not prosper because the mother's milk is unsuitable. This is atrophy by inanition. Inanition is often seen in cases where the infant nurses only one breast. The fault here is one of quantity not quality. Too frequent and irregular nursing may produce digestive trouble resulting in atrophy. Sometimes milk too rich in casein or in fat disturbs nutrition and impairs growth. Milk may become toxic and harmful as a result of various diseases to which the mother is subject.

He says that infantile atrophy is rarely the result of organic malformations or of functional insufficiency. The proportion of atrophic breast-fed to bottle-fed infants is 1 to 20. After an experience of more than ten years, Variot is satisfied that sterilized milk of good quality, well and methodically handled, suffices in an immense majority of cases to restore cases of atrophy. Asses' milk did not prove satisfactory in Variot's opinion.

He recommends a nursing bottle graduated according to the body weight of the infant, making this the index rather than age. There is no fixed rule by means of which the amount to be given to atrophic infants can be regulated.

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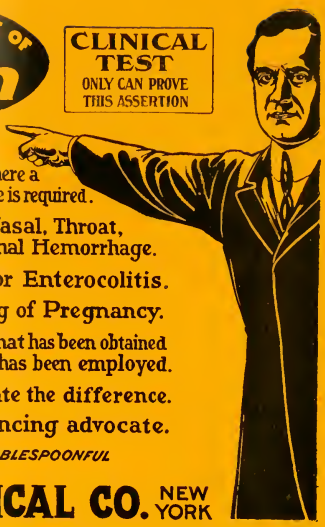

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Dietetic Treatment of Skin Diseases.

Lassar (Dermatologische Zeitschrift) claims that dietetic measures are of the greatest importance for the cure of various cutaneous affections. Psoriasis, for instance, is unmistakably benefited by refraining from meat. Cheese is liable to aggravate certain skin diseases, or possibly induce them. All kinds of erythemata and rashes with exudation are benefited by calomel purges, followed by a course of mineral waters. Salicylic medication is a valuable adjunct. The salicylic acid seems to attack the morbid process like an antitoxin, and paralyze the evil effects of the poisons circulating in the blood. The patient must learn what articles of food he must avoid, and should strive to eat at regular intervals and in small amounts. A single hastily eaten meal when he is overfatigued, overheated, or irritated, may affect him like ingesta-containing ptomaines. In case of prurigo the nervous system must be soothed and sleep restored. Eczema frequently develops after the prurigo, and both may be avoided by keeping the bowels in good order, avoiding excess of bread and potatoes, and all other causes tending to induce flatulence. Prurigo patients are usually constipated, with hard stools. The tendency to furuncles and phelgmons in diabetic and gouty subjects may be combated by putting the patients on a sugar starvation diet. So soon as all substances are avoided that form or are transformed into sugar, the tendency to furuncles subsides. The excess of sugar in the tissues affords fine culture media for the pyogenic germs. When this excess is avoided the germs cease to colonize in them, irrespective of whether the elimination of sugar is physiological or pathological. The same reasoning and conclusions apply to uric acid poisoning in gout. Any intoxication may affect the skin and reduce its resisting power. He defines scrofula as a lesser resisting power due to inherited weakness and insufficient nourishment or care, and insists that everything which tends to enhance the resisting power aids in curing the local affection. Obese subjects should diet to reduce their weight, and by this means avoid cutaneous lesions from friction between folds of the skin.

The Treatment of Ringworm of the Scalp by the X-Rays.

Oram (Dublin Journal of Medical Science) says that it seems probable that in the X-Rays we have an agent which, when carefully and judiciously used, will reduce the treatment of ringworm of the scalp from years to months with the smallest possible trouble and inconvenience both to patient and physician. His patients have four treatments a week. He has two masks made of fine-meshed wire gauze and covered with lead foil, so that they may be opaque to the rays. In one of these the openings are back and front, while in the other they are at the sides. These masks are used on the alternate days, Monday and Thursday, Tuesday and Friday. In this way each area receives two exposures weekly of ten minutes' duration. By the end of the third week the scalp begins to show some erythema. The hair has as a rule entirely fallen off by the end of the fourth week, leaving the scalp bare and free from fungus. As to the position of the tube, the anticathode must be placed directly opposite the area to be treated, so that the rays fall perpendicularly on the skin. The tube must be placed not less than six inches from the skin. The writer uses the current that is given by three or four amperes running in the primary of a 12-inch coil, interrupted by the Mackenzie-Davidson mercury motor break. A storage battery of twelve elements giving twenty-four volts is used. He thinks that a soft tube gives the best results. Now and then slight folliculitis develops. This is superficial, and disappears on appropriate treatment The writer has never treated a child less than four years old. The hair takes about three months to grow again. There is little reason to think that any untoward results will follow this method. He believes that a milliamperemeter should always be used when the X-Rays are employed for therapeutic purposes.

Treatment of Enuresis and Polyuria by Epidural Injections.

Freeman (British Journal of Children's Diseases) has obtained beneficial results in a number of cases, of which he gives the histories, by the use of epidural injections of physiological salt solution, into the sacral canal. The fluid passes into the space between the periosteum of the vertebræ and the membranes of the cord. There is plenty of room in the canal, but the passage for the needle is quite small in young children. From the age of nine years upward the operation is easy, and can be done without any anesthetic. The fluid seems to act upon the nerve roots of the cauda equina, rather than on the spinal cord. The effect is a stimulation of the nerve roots, which spreads up to the lumbar controlling center, and reflexly excites its corpuscular elements so as to produce inhibition. The fluid injected does not seem to matter, and a good effect is obtained after one injection, but it should be repeated two or three times to get permanent effect. A large needle is required, from 1½ to 3 inches long. landmarks are the sacral cornua and the tip of the coccyx, keeping in the middle line, and the needle should be pushed home upward and for-

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ward, and when it has entered it will be felt that there is plenty of room in the canal.

Surgical Intervention in Renal Disease.

Yvert (Rev. de Chir.) draws an interesting and striking analogy between the nephrotomy of Pousson and the decapsulation of Edebohls. The writer divides the subject into three heads, intervention in acute nephritis, in chronic nephritis, and finally in certain essentially medical affections of the kidney itself. The acute conditions which are further subdivided into those arising from ascending infection, those of a circulatory type and those of mixed type, are discussed with admirable clearness and the effect of various treatments indicated. He seems absolutely just in his treatment of the two opposing theories or technics, as they should more rightly be called, of decapsulation and kidney incision. The author traces the steps by which Pousson reached his conclusions as to the efficiency of renal section, and shows to what a degree they resemble the steps by which Edebohls arrived at a very similar conclusion in regard to decapsulation. The review of decapsulation literature up to date is very full. As to the choice between the Pousson or the Edebohls operation, the author says, that in considering the two, the brilliant researches of the English surgeon, Harrison, should not be forgotten. To this early observer the tense capsule of the congested kidney of acute nephritis bore the same relation to that organ as the iris to the eye in cases of glaucoma. Furthermore, in the opinion of the author, although decortication does not appear to present either great technical difficulties or to entail serious postoperative complications, it is, nevertheless, well to recollect that it constitutes in every case a somewhat more difficult intervention and one certainly more grave in its possible sequels than simple section of the kidneys. A further and even greater objection to decortication would appear to be that its benefits do not begin to show themselves until at the end of eight or ten days at the minimum, whereas, on the other hand Pousson's nephrotomy gives immediate results. Continuing, the author says: "It

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is essential to remember that the very principle of the technic of decortication has been brought under very severe criticism from a histological standpoint, it having been shown that the supposed increase of vascularity between the parenchyma of the kidney and the perirenal tissue probably exists either to a very small extent or else not at all. The good arising from decapsulation, then, must be attributed to a release of the endonephrytic tension, or else to a stimulation of the reflex renal nervous system." Accordingly, the conclusion is that in the present status, no positive choice can be made between decapsulation and nephrotomy in the treatment of chronic nephritis.

Miscellaneous.

Cholagogue Action and Biliary Disinfection.

By W. H. Morse, M. D., Hartford, Conn.

Those three intensely practical words, "Can't afford it!" reach the practitioner's ear with rasping harshness in cases of hepatic torpidity where the advice is given to the patient in moderate circumstances to "take the waters." It is pleasurable and eminently proper, in dealing prescriptively with the patient whose purse-strings are garnished with six ciphers, to advise him to take Carlsbad with and without rest, or Neuenahr, or some other hepatic sanitarium, ad infinitum. But when the purse-string is stretched with two ciphers, and perhaps with one, "the waters" are incongruous, and that triad of practical words has a selective tendency to act on the ear without gentleness. Then it is that the "Just as good!"—the abominable triad of the pharmacist—imposes, and the patient is dosed with that which is pronounced "substitutive for the waters, and j. a. g. (just as good)". In point of fact, the conscience shows its elasticity when the practitioner maintains that the "j. a. g." is even better than "the waters." That depends on the proper estimation of the term. The fact (inelastic) is that altogether too many, if not all, remedies of this class have hitherto signalized their action by setting up and persistently maintaining a gastro-enteritis, disagreeable, and often severe. Chologen provides an example; eunatrol is another. It is true that the action is "corrected" (by soap, as a striking instance,) and with nausea in repletion as the sequel. And yet, as our fathers gave calomel as the one hepatic stimulant, and a stimulant to the production of a pathological bile, so we prescribe the "just as good" and subsequently treat the gastro-enteritis with due care.

M. T., age 46, man servant. Mother died of old age, father was a victim of jaundice thirty years, but died of strangulated hernia. Patient had "lived well," indulged freely, and had been in the hospitals twice (it may be three times) for treatment inside of a year. On the second occasion, with symptoms indicative of appendicitis, had been operated on, and the appendix found to be healthy. Had come the last time, complaining of intense and continuous abdominal pain, relieved only by hypodermics of morphia. It had been his contention from the first (based on the diagnosis of his family physician, in the country) that he suffered from gall-stone colic; and as the operation for appendicitis had not changed the complexion of things at all, he made declaration of faith, and the physicians decided that he was right. Sub-acute inflammation of the gall bladder and common duct, with retained bile or gall-stones, a result of gastro-intestinal disturbance, primarily, with extension of inflammation and bacterial invasion from the duodenum up the duct into the gall-bladder. Under the circumstances of the operation for appendicitis, it was not considered wise to give chologen. After relief had come from the use of the opiate, he went away. The staff expected him back just as soon as another attack of acute indigestion occurred. It was only two days before he reappeared, not sick, but to inquire if the doctors did not think that a course of the waters of Carlsbad would benefit him? He explained that he had learned that a certain gentleman of eminence in Congress, and of prominence in American politics, was afflicted with symptoms which answered almost precisely to his, and had been ordered across the ocean to "take the waters." As his valet had found it inconvenient to accompany him, M. T. stated that he would seek the situation, that he might also "take the waters." Some three months later the statesman returned home and died. The following winter M. T. came to the dispensary accompanying an accident case. Upon inquiry he stated that he had not had an attack of colic for eight months; and the remark was made that the springs did him more good than his master had experienced. He replied that he had not obtained the position as valet, but had taken another in Camden. There he had had one of his attacks, and had well-nigh succumbed, when his physician "gave him something that helped amazingly," which he had continued to take until he had made a full recovery. With much interest in this case, the physician was communicated with, and he furnished the following report:

"Maartens T., Dane, serving-man, age 46. Great sufferer from hepatic colic for two years or more. Called to see him.

IN THE TREATMENT OF

ANÆMIA, NEURASTHENIA, BRONCHITIS, INFLUENZA, PULMONARY TUBERCULOSIS, AND WASTING DISEASES OF CHILDHOOD, AND DURING CONVALESCENCE FROM EXHAUSTING DISEASES,

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As these cheap and inefficient substitutes are frequently dispensed instead of the original, physicians are earnestly requested, when prescribing the Syrup, to write "Syr. Hypophos. FELLOWS."

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Worst case I ever saw. Condition close to collapse. Gave him Sulpho Lythin in (what I call) heroic doses. He progressed nicely, taking nothing else except a hypodermic of 0.015 gram morphine and 0.001 gram atropine, to relieve the acute pain. Passed fine particles of a substance, identified as fragments of gall stones. Ordered him to continue taking the remedy. Have not seen him since May. Understand he is in your city or Newark."

The case had indeed "progressed nicely." From the color of old parchment the skin had become clear and healthy. The eyes sparkled with light, where they had been dull with the hue of gold ore. The urine, which had been almost black, was normal. And the patient had gained thirty pounds in flesh, ate well, slept well and had not had a spell of colic as above stated for eight months.

Asked if he had had any weakness at the site of the operation for appendicitis—with a view to discover whether the remedy had had any gastro-enteric effect,—he replied in a hearty negative. Was avoiding alcoholics and notoriously indigestible food, and needed no substantiation of the statement that he was a well man.

The only necessary commentary is that he was well because he had a normally-acting liver. This may stand illustrative as an extreme case. Of cholagogue and biliary disinfectant effect, Sulpho Lythin has made a good reputation, in all forms of bile stasis without concretion formation. Carried further, where there are calculi, the relief of the hepatic derangement is the signal for the inception of the cure of the cholelithiasis, cholecystitis or cholangitis.

The two questions revert: "Is it not j. a. g. (just as good) as 'taking the waters'?" and "How about the 'can't afford it!' argument in such cases?"

We laugh at our grandmothers for laying so much accent on "the liver out of order," and the old doggerel stands,—

"If Mr. A. or B. is sick,
Go, call a doctor, and be quick!
The doctor comes, with rare good will,
And—ne'er forgets his calomel!"

Out on the "calomel" and "blue mass," but let us ask our common sense if derangement of the liver is not responsible for much of the general ill health, and if the standard of health does not depend on its normal action?

Nutrivine.

One of the most difficult things that the doctor has to contend with is to procure a reliable article of Cod Liver Oil. In Nutrivine, prepared by the Peter-Neat-Richardson Co., Louisville, Ky., will be found an example of a properly prepared medicine of this character. It contains the properties of the best Norwegian Cod Liver Oil, without its nauseous and offensive taste.

The Treatment of Nasal Catarrh.

By John A. Hale, M. D., Alto Pass, Ill.

For years I used various remedies and met with varying success, until tiring of one remedy after another I relied solely on Potassium Permanganate in weak solutions as a nasal douche, but a review of some points in this paper will show why I always sought for something else. Glyco-Thymoline has usurped the place of the permanganate solution in my armamentarium, and after sufficient trial established faith, implicit faith, in its specific therapeusis for this condition. A knowledge of its essential constituents and their therapeutic action only tends to strengthen a belief in its specificity. Caution is necessary in the selection and use of remedies, but a fair trial has proven no untoward inconvenience emanating from the use of this remedy. Meanwhile the therapeutic results are gratifying and the good effect of Glyco-Thymoline can be easily verified by a trial, when conclusions will be the result of practical truths only.

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A recent number of The Quarterly Journal of Inebriety, published under the auspices of the American Association for the Study and Cure of Inebriates, Hartford, Conn., U. S. A., says,—"Antikamnia Tablets are one of the best remedies and are very valuable as a mild narcotic in neuralgias from alcohol and opium excesses. We have used them with best results." The Edinburgh Medical Journal—Scotland—says regarding Antikamnia: "In doses of one or two tablets, it appears to act as a speedy and effective antipyretic and analgesic." The Medical Annual, London, Eng., says: "Our attention was first called to this pain reliever by an American physician whom we saw in consultation regarding one of his patients who suffered from locomotor ataxia. He told us that nothing had relieved the lightning pains so well as antikamnia tablets, which at that time were practically unknown in England. We have since used them repeatedly for the purpose of removing pain, with most satisfactory results. The average adult dose is two tablets which may be repeated every two or three hours without fear of unpleasant symptoms."

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Chronic and Recurrent Winter Coughs and their Treatment.

Much has been written about chronic coughs, especially those of a recurrent character with exacerbations more or less dependent on climatic or seasonable changes. In spite of the extensive literature on the subject, treatment is still indefinite and as a conseqnence these cases too often drag aloug with little or no substantial improvement. This article, therefore, is intended to draw attention to a line of treatment that has proven very successful in my hands, and which I believe will give unusually gratifying results in nearly all cases of chronic coughs not actually dependent on tuberculosis or bronchiectasis.

Observation and study has shown that the different forms of chronic bronchitis can be divided into several classes. This classification, which is of the utmost value in therapeusis, is defined by the principal etiologic factors in each case, accordingly as they are, local, constitutional or nervous in character. For instance, if the leading cause is a special susceptibility of the bronchial mucous membrane to inflammatory processes, a condition which is generally recognized as a catarrhal diathesis, the resulting bronchitis is more definitely a local disease. If the chronic bronchitis is the result of an inflammatory process produced by disorders of nutrition like rheumatism or gout, or by a chronic toxaemia like alcoholism, or still further by the circulatory derangements accompanying renal or cardiac diseases, the bronchitis may be said to be general in its origin. Again, where the coughs and symptoms depend on neurotic conditions, the prime factor is nervous irritability of the nerves intimately connected with the respiratory organs and the bronchitis may be said to be nervous in its origin.

It is apparent in all these types of bronchitis, that the local process gives the prominent symptoms characteristic of the disease. These symptoms, however, while very variable, often show peculiarities that indicate their etiology.

Chronic, persistent cough is the one great symptom, accompanied by greater or lesser quantities of expectorated material. In a simple catarrhal bronchitis, the expectoration is usually muco-purulent and profuse in quantity. These cases are subject to frequent exacerbations precipitated by the slightest changes in the weather. In many patients the cough recurs every winter. Very little trouble is experienced during the warm months, and in many instances none at all, but it comes on regularly as the weather grows cold. The cough which follows is very distressing, and often weakens the patient to a marked degree; but, aside from the bronchitis and its attending exhaustion, there is no other evidence of disease of the respiratory organs.

The coughs which accompany rheumatism, gout, or alcoholism are much more constant the year round, and while expectoration is rarely ever profuse, it is seldom absent. In the bronchitis which complicates diseases of the heart and kidney, the extent of the process and attending symptoms depends on the extent of the cardiac or renal difficulty. It is usually progressive and is accompanied by very persistent coughing and considerable expectoration. In coughs of nervous origin the attacks are usually paroxysmal, precipitated by emotional disturbances or nervous excitation. Expectoration is very slight and many times entirely absent.

In all the foregoing types of cough there is, as a rule, no febrile action, little or no emaciation, and very slight, if any, marked impairment of the general health. The persistence of the cough itself may be very wearing, and often lowers a patient's vitality. The cough itself, therefore, is the great symptom of which the patient complains and it is especially annoying when aggravated at night, or in public places.

In treating these conditions, while the etiologic factors should be given due attention in every case' general and local measures invariably give relief and comfort to the patient. In other words, the first object is to improve the general health and calm the cough. Having done this we are in a much better position to seek and eradicate the exciting and contributing causes.

Difficulty in expectorating is one of the most distressing phases of chronic cough, and to liquify and facilitate the raising of sputum, ammonium chloride may be administered with advantage, as well as various balsams like benzoin, styrax, etc. I also have found that inhalations of Tinct. Benzoin Comp. tend to loosen the mucus.

Local applications to the chest, like heat and counter-irritation, are often useful. But the effect of all such treatment is usually only temporary. Consequently, a remedy is needed that will sooth the local conditions promptly, allaying the spasmodic character of a cough and facilitating expectoration. Recently I have prescribed Fitchmul with excellent results. This preparation is a happy combination of purified balsams, chloric ether, hydrocyanic acid, antimony and potassium tartrate and aromatics. Through its use I have succeeded in greatly relieving a number of cases, and in many instances have brought about a complete cure.

Following I will report a few cases that may possibly be of some interest as I treated them along the lines mentioned above. In each case the results were very satisfactory both to myself and the patient.

Case I.—Merchant, male, 58 years old. Had been troubled with a severe cough at night for eight years or more. There was very little expectoration, and his cough was spasmodic in character and very prolonged. He occasionally felt pain in lower part of chest. This I attributed to the continued coughing. I prescribed tonics for the general health, gave proper instructions regarding diet, exercise, etc. For the cough I ordered Fitchmul, which met the requirements nicely. Within a few days the cough became much less frequent and the paroxysms much shorter in duration. The following winter he began the use of Fitchmul at the beginning of cold weather and was not troubled with the cough during the entire winter.

Case II.—Barber, male, 26 years. Robust and of good habits. Consulted me concerning a cough he had been troubled with for three years. Had suffered from an attack of acute bronchitis three years previous and had been troubled with the cough ever since. Gave him instructions as to outdoor exercises, ventilation of room, etc., and prescribed Fitchmul for the cough. I did not see him again for more than three months when he reported that he was entirely free from the cough.

Case III.—Female, school teacher, age 26 years. At the age of twenty she suffered from an attack of rheumatism, with complicating bronchitis, and had been troubled with a cough continually since. The cough was very annoying in character, spasmodic and prolonged. After each paroxysm she was exhausted and during the attacks she frequently urinated involuntarily. Her case was one of chronic bronchitis, aggravated by an exceedingly irritable condition of the respiratory tract. I placed the patient upon constitutional treatment, Iron, Strych. and Arsenic in pill form. Gave particular directions as to the regulation of diet and mode of living, and for the cough I prescribed Fitchmul.

The improvement was marked and very rapid. The general nervous condition soon became improved. The cough grew less, and soon lost its spasmodic character, and in a comparatively short time, a complete cure was effected.

Case IV.—Age 56, retired merchant. Had been troubled for twenty years. Entirely free from cough in summer, but very bad in winter. Strong and healthy with the exception of the cough, which,

. . . RELIABLE PREPARATIONS . . .

Resinol Soap AND Ointment

KEEP THE SKIN RIGHT.

These are timely and handy preparations. Their utility has no bounds. They are helpful in all skin troubles. Skin inflammations, such as Sunburn, Eruptions of Poison Oak, Scalds and Burns, or those caused by the handling of chemicals, as in developing KODAK FILMS, etc., yield immediately to the healing qualities of Resinol Ointment. For Eczema, Herpes, Pruritus, Barber's Itch, etc., it is the recognized and standard prescription with the rank and file of medical men.

Resinol Soap should always be used as a prophylactic, and as an adjunct to the Ointment. Samples sent on request.

RESINOL CHEMICAL COMPANY,

GREAT BRITAIN BRANCH:
97 New Oxford Street, London, W. C.

BALTIMORE, MD.

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Chas. Markell & Co., Sydney, N. S. W.

like most recurrent winter coughs, was hard, dry and prolonged. Prescribed Fitchmul. A marked improvement was noticeable in a very short time, and a continued use of the remedy resulted in a complete cure. Nor has he been troubled with the cough since.

S. E. FOWLER, M. D., Ph. D.,
Kansas City, Mo.

Virtue Running Wild.

The sentiment which underlies the present efforts of certain worthy medical men, to protect the profession from imposition and to make our therapy clean, reliable and trustworthy, is entirely laudable and commendable. The extent to which some of these gentlemen are permitting their enthusiasm to carry them is lamentable. The judgment passed upon many of the pharmaceutical preparations which have stood the test of time for years in the practices of thousands of successful medical men, has seemed hasty and ill-advised. To one who is prejudiced in neither direction, who endeavors to look at the matter with perfect fairness, it is very questionable if it is right that a small faction of the American Medical Association should use the organ owned by all of the members to condemn or detract from the reputation of long established pharmaceutical preparations, many of which are used regularly by a large part of the membership of the Association. The manufacture and sale of pharmaceutical preparations is and must be commercial in its character. It can never be strictly professional. The average preparation which has been used by medical men of intelligence for years with good results must have something in its favor, even if its manufacturers are not willing to conduct their business exactly as we may wish to dictate. I have no desire to uphold in any way the secret medical nostrum, but I question as a matter of fairness, the propriety of attacking any well-tried preparation until it is demonstrated beyond reasonable doubt that the members of the Association are opposed rather than being users of the preparation in question. Those who have been placed in positions of power—which may be used for the accomplishment of evil as well as good—should appreciate that such an office is one of trust and there should be an effort to carry out the will and wish of the majority rather than to be led by personal prejudices or petty motives. G. T. P.—The Chicago Clinic & Pure Water Journal.

These trade-mark crisscross lines on every package.

Gluten Grits AND **BARLEY CRYSTALS,**

Perfect Breakfast and Dessert Health Cereals.
PANSY FLOUR for Pastry, Cake and Biscuit.
Unlike all other goods. Ask Grocers.
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SAL HEPATICA

The original effervescing Saline Laxative and Uric Acid Solvent. A combination of the Tonic, Alterative and Laxative Salts similar to the celebrated Bitter Waters of Europe, fortified by addition of Lithium and Sodium Phosphates. It stimulates liver, tones intestinal glands, purifies alimentary tract, improves digestion, assimilation and metabolism. Especially valuable in rheumatism, gout, bilious attacks, constipation. Most efficient in eliminating toxic products from intestinal tract or blood, and correcting vicious or impaired functions.

Write for free samples.

BRISTOL-MYERS CO.,
Brooklyn, New York City.

Those of the medical profession who, like myself, have been in the harness for two score years or more, can look back to the primitive methods and remedies used by us in our earlier days of practice, and then note the advantages we enjoy today in the way of modern therapeutic agents, and truthfully say that the advancement in the science of therapeutics and pharmacentics has been truly wonderful.

While it is true that we employ practically the same remedies as in days gone by, or the active principles of the same drugs, yet thanks to the pharmaceutical chemist we are now enabled to prescribe them in a more agreeable form with all the inert matter eliminated and the desired constituent whose physiological action we wish to obtain remaining, and in the majority of preparations where that particular principle would be unpleasant to the palate, it is skillfully combined with aromatics, etc., that do not detract from its therapeutic value yet render it agreeable to take.

As an illustration I call your attention to a remedy that no doubt the majority of us have used in treating tuberculosis, phthisis, scrofula, chronic pectoral complaints, and all wasting diseases. I refer to cod liver oil. From my experience and observation I think it has been used with uniform success in those cases wherein the use of a remedy of its nature was indicated. The only objection to its use that has ever been advanced to my knowledge, was the fact that many sensitive stomachs could not tolerate it on account of the disagreeable taste and smell; but now, thanks to the advancement in therapeutics, those disagreeable features have been eliminated, and we now have in Hagee's cordial of cod liver oil compound, a preparation containing all the active principles of cod liver oil, yet so skillfully combined with arometics, etc., that the most sensitive and delicate stomach will not rebel at its administration; and thus we are enabled to use this sovereign remedy wherever its use is indicated. I have had some excellent results from its administration in cases of brain exhaustion and nervous debility, while in chronic pectoral complaints and wasting diseases, and wherever an alterative and reconstructive tonic was needed, the above combination was my chief anchor.

B. B. RALPH, M. D.

Kansas City, Mo.

Dr. E. Jay Fisk, Troy, N. Y., uses Eusoma in the treatment of all forms of irritation of the throat, and states that even in follicular tonsillitis he ha been surprised, as well as pleased, with the prompt and satisfactory results which he has obtained from its use. Dr. Fisk prescribes Eusoma as a local application in these cases, and, almost without exception, immediate relief from unpleasant symptoms is obtained. Dr. Fisk also states that he gives Eusoma internally in irritative diseases of the skin, supplementing its internal use by the external application of the same remedy.

Dr. Fisk's experience is confirmatory of that of other physicians who have studied the clinical use of echinacea. Dr. A. B. Matthews, of Elberton, Ga., in an article published in the Georgia Practitioner, May 15, 1905, states "that it promotes the flow of saliva with feeling of well-being in the stomach, and is slightly diaphoretic, increasingly if continued. The action of the kidneys and whole glandular system seems to be stimulated under its influence. The stomach is improved in its function, the appetite increases, food is more perfectly digested, the bowels operate better and absorption and assimilation and general nutrition are in every way improved. It encourages secretions and excretions and in this manner prevents any further autoinfection and quickly relieves the system of any that is present."

Eusoma is simply echinacea combined with the adjuvants, thuja and baptisia, and is without doubt the most reliable preparation of echinacea upon the market. Each fluid dram of Eusoma contains 15 grains of echinacea, 2 grains of thuja and 4 grains of baptisia.

The Eusoma Pharmaceutical Co., of Cincinnati, have collected a large amount of information with regard to echinacea, which they will be glad to mail to any physician requesting it.

Dr. W. H. Harrell, of Williamston, N. C., died of pneumonia November the 25th. Dr. Harrell was a prominent physician and his death is a great loss to the people of the State, especially the section in which he lived. He had been practicing medicine for about twenty years and was a prominent member of the North Carolina Medical Society.

Bronchiline.

There have been but few specifics discovered for any disease that flesh is heir to. No one in this day expects such a thing. It is equally true that a few standard remedies furnish nearly all that we have that can be safely used. Bronchiline is a compound elegantly put up, carefully harmonized and one of the few tried and well known remedies for all ailments of the bronchial tract or of the lungs. The formula is furnished with each bottle. Full particulars upon application. Peter-Neat-Richardson Co., Louisville, Ky.

Insanity Among Negroes.

The annual report of Dr. W. F. Drewery, superintendent of the Central State Hospital, at Petersburg, Va., contains interesting statistics regarding the alarming increase of insanity among the negro population. The number of patients sent to the hospital during the year was 170 more than the previous year, showing an increase of about 50 per cent. The number in the hospital was 1,449, or 115 greater than the year before. The smallest number under care at any one time was 1,101 and the largest 1,305. The number present at the end of the year was 1,181, or 80 over the previous year. The growing prevalence of mental disease among the negroes is ascribed to physical conditions and degeneracy induced by indolent, unhygienic, and immoral methods of life, as well as to the influence of heredity, rather than to any forms of mental stress or overwork.—Exchange.

Antidipsole.

Antidipsole is the result of the experience and experiments conducted for more than a quarter of a century by one of the best physicians in the profession, having opportunity to test its effectiveness in thousands of cases of drunkenness. No doctor can read the formula and say else than that theoretically it should be all that is claimed. A trial will prove that practically it does all that it promises. For full particulars address Peter-Neat-Richardson Co., Louisville, Ky.

GOLD MEDAL
ST. LOUIS, 1904

BRONZE MEDAL
PARIS, 1900

The Tri-State Medical Association of the Carolinas and Virginia.

The eighth annual session of the Tri-State Medical Association will be held at White Stone Lithia Springs, S. C., February the 27th and 28th, 1906. This is becoming a great society and is in perfect harmony with each of the State societies. It is doing a great work. Any physician in good standing and a member of his State society is eligible for membership. Members or others contemplating writing papers will please send titles to secretary by February 10th, for its proper place upon the preliminary program. The secretary requests that Chairmen of Sections will likewise send in names of articles and authors by that date.

For further information concerning this approaching meeting write to Dr. R. E. Hughes, Sec. and Treas., Laurens, S. C.

That horrible silence which sometimes comes over an assembly of people had begun to work its stupifying, hypnotic influence, until it became almost impossible for any one to breathe. It was the awful moment known to all, when timidity becomes infectious and the boldest has not the courage to launch what he considers his star story, and the very thought of perpetrating a joke right out loud sends a chill down one's spine. At this stage of the agony these whispered words, of a young man, pierced the room like the sound of a midnight bell on a cold winter's night, as he addressed the daughter of the hostess:

"Ho-how is yo-your mo-mother? N-not that I ca-care a da-damn, but it ma-makes ta-talk."

Japanese Losses in the War.

According to the Tokio correspondent of the London Times, the Japanese Minister of War, speaking at a banquet of representatives of the medical service, said that Japan at one time during the war had 1,200,000 troops under arms. Of this number 70,000 died and 310,000 were wounded or sick, but only 15,000 died of sickness, and 9800 died of wounds after coming under treatment.—Exchange.

The mother-in-law, that-wont-come-off, was reading aloud the household column of the evening paper. The doctor sat silent and unusually thoughtful for he was worrying about a certain prescription he had written early in the day, and wondering if he had not somewhat overestimated the capacity of a patient for whom he had prescribed one-quarter of a grain of strychnine. Consequently, it gave him a jar, when the old lady read, that strychnine was good to use as a tonic. She said she felt run down and inquired how large a dose he thought it would be safe for her to take.

"If you don't care to take too much," he replied, as his face brightened up, "I think a tablespoonful would be about the proper dose."

Eclampsia Occurring Fourteen Days After Confinement.

Cuscaden (Australasian Medical Gazette) mentions a case in which a woman, confined on April 17, 1905, after a normal puerperium was seized on May 1st (the fourteenth day) with two epileptiform convulsions followed by slight coma. The urine contained albumin. On May 9th and 10th two less severe fits occurred. On May 18th she had two similar attacks lasting only a few minutes. The patient recovered and the albumin disappeared from the urine.

They were speaking of the tendency at the present time of prescribing palatable medicines and few of them. This reminded the old doctor of the sea captain who had reduced the number of drugs he kept in his medicine chest to two: one was ipecac and the other epsom-salts. When a sailor was ill the captain laid him down on the deck and measured his length. Then he inquired the location of the symptoms, and the patient received the indicated one of the two remedies according as the pain was above or below the dividing line.

The eighth of a series of twelve illustrations of the intestinal parasites gotten out by Battle & Company has just arrived. The work is extremely well executed, both from an artistic and scientific standpoint. Although text books on these subjects contain some illustrations of this kind they are in reality rather crude as compared with these. These illustrations bring out many of the finer and more essential points which are at times quite necessary for an accurate diagnosis. These illustrations can be obtained by physicians on application to Battle & Co., 2001 Locust St., St. Louis.

The usefulness of good Hypophospites in pulmonary and strumous affections is generally agreed upon by the Profession.

We commend to the notice of our readers the advertisement on page xviii of this number. "Robinson's Hypophosphites" an elegant and uniformly active preparation; the presence in them of Quinine, Strychnine, Iron, etc., adding highly to their tonic value.

The Berlin University is the most numerously attended seat of learning in the world. At present 9,104 students are studying there. Among those in the University are 123 Americans.

JOHANN HOFF'S MALT AND IRON

(PEPTONATE OF MANGANESE AND IRON.)

Is an ideal preparation to build up

BLOOD AND BODY

(Each wineglassful contains 1 gramme of Peptonate of Manganese and Iron.)

It is a Nutrient Oxygen Carrying Agent

Contains only a minimum amount of alcohol (less than 3%); is more readily absorbed into the circulating fluid than the iron preparation by itself. .

Johann Hoff's Malt and Iron is of marked and certain value in all forms of Anæmia, Chlorosis and general debility.

EISNER & MENDELSON CO. of New York,

SOLE AGENTS.

Drop a postal for a free Copy of the Medical Mirror.

If you want to read a journal full of interesting editorials and original matter drop us a postal card and we shall send you a copy of the **Mirror.** The **Mirror** is one of the most interesting **Medical Journals** published. It is brimful of interesting and instructive matter each month. Our original matter is prepared by men in the city and country practice, and you will find it just the sort of matter you want to read.

Long-winded reports and meatless papers are barred from the **MIRROR'S** columns. We are really anxious to send you a copy. Write now.

THE MEDICAL MIRROR.

820 No. Grand Ave.

St. Louis, Mo.

NEW ORLEANS POLYCLINIC

NINETEENTH ANNUAL SESSION OPENS NOVEMBER 6th, 1905, AND CLOSES MAY 19th, 1906.

Physicians will find the Polyclinic an excellent means for posting themselves upon modern progress in all branches of medicine and surgery. The specialties are fully taught, including laboratory and cadaveric work. For further information, address:

NEW ORLEANS POLYCLINIC,

Postoffice Box, 797. - - - - - - - - - - NEW ORLEANS, LA.

Some one in the party expressed surprise to the German, who was drinking a large amount of beer, and said it did not seem possible that a person could drink so much. The German smiled and claimed it would be a simple matter for him to drink a gallon more in five minutes. This was questioned and a wager was made. While a gallon measure was being filled at the bar the German excused himself for a little while but came back almost as soon as the beer was served. He won.

On the way home a man asked the German why he had left the room after the wager had been made.

"I went to the corner to another saloon," he replied, "and drank a gallon of beer to see if I could do it."

Grippe.

An eliminant in the treatment of grippe is self-evident, for the sooner the germ of the disease is expelled, the more rapid the recovery and the less likelihood of any sequelae.

Tongaline presents an ideal remedial agent in grippe because it relieves the pain, reduces the fever, eliminates the poisons and stimulates recuperation.

Experiments conducted by a German surgeon demonstrated the danger from blood poisoning which can easily result from conversation while operating on a patient. He found that the minute drops of saliva expelled in the act of speaking contained on an average 4,375 bacteria, many of which are disease producers.

The Louisiana State Board of Medical Examiners held its semi-annual meeting on Tuesday and Wednesday, November 14th and 15th. There were twenty-two candidates for license to practice medicine in the State. Sixteen of this number, including two women, were successful. There were ten applicants for midwifery licenses, and two, both colored women, failed. The board is composed of the following named physicians: President, Dr. A. F. Barrows, of St. Francisville; vice-president, Dr. F. M. Thornhill, of Arcadia; secretary and treasurer, Dr. F. A. Larue, of New Orleans, Dr. E. L. McGehee, of New Orleans; and Dr. C. D. Simmons, of Baton Rouge. The next meeting of the board will be held on Thursday and Friday, May 3 and 4, 1906.

One Moment, Please.

Just at this season, when inflammatory affections of the respiratory organs are so prevalent, it is a matter of much importance to apply methods of treatment that will control the respiratory symptoms without deranging the other functions of the body. Expectorants fail so frequently that they are, to say the least, unreliable; cough syrups derange the stomach and thereby add a complication; respiratory sedatives, of which opium and its derivatives are the most frequently employed, depress the central nervous system and have but a transient palliative effect from which an undesirable reaction nearly always results. How much better it is to hold the respiratory symptoms in abeyance with a remedy which not only is absolutely free from deleterious influences, but has also pronounced constitutional effects, which reinforce its specific action on the respiratory tract.

That Gray's Glycerine Tonic Comp. has these influences is accepted by the profession at large because the experience of many years has demonstrated the fact beyond question. A convincing proof is evidenced by the effects of this remedy in the ordinary forms of acute bronchitis or "cold." Almost immediately do the symptoms of respiratory inflammation become less pronounced when Gray's Tonic is administered: cough is lessened, bronchial distress relieved and expectoration facilitated; persistence in the use of this remedy will practically always control these troublesome symptoms and shorten, very materially, the duration of the attack.

In chronic bronchitis and "winter cough," Gray's Tonic is a well-nigh indispensable ally to successful treatment. Its use palliates the respiratory symptoms and exercises a beneficial influence upon nutrition in general—and this latter effect is a matter of no small importance, so authorities state, in overcoming these chronic and recurrent forms of bronchitis.

Because of these effects, the routine administration of Gray's Tonic in the acute infectious diseases with respiratory complications, has become a widespread habit. Influenza, pneumonia, typhoid fever are, by means of this practice, rendered less troublesome by the specific action of Gray's Tonic on the respiratory tract—the course of the disease is obviously modified and convalescence more speedily established.

Twenty years experience of skilled scientific physicians constitutes the foundation upon which the above statements are based. Their recognition and application by every physician means much gained in treatment.

The Southern Medical College Association held its annual meeting at Louisville, Ky., on Monday, December 11, 1905, under the presidency of Dr. Christopher Tompkins, of Richmond, Va. The following named colleges are members of the association: Medical Department of the University of Tennessee, Nashville, Tenn.; Medical Department of the University of Nashville, Nashville, Tenn.; Medical Department of the University of the South, Sewanee, Tenn.; Medical Department of Vanderbilt University, Nashville, Tenn.; Medical Department of Fort Worth University, Fort Worth, Texas; Medical College of Virginia, Richmond, Va.; Tennessee Medical College, Knoxville, Tenn.; Medical College of Alabama, Mobile, Ala.; Birm-

In pneumonia warmth is important because cold skin means contracted cutaneous vessels, and this means increased congestion of the pulmonary vessels."

Dr. J. E. Winters to the N. Y. Academy of Medicine.

Antiphlogistine

is the only practical method of applying heat to the chest walls in

PNEUMONIA
PLEURISY
BRONCHITIS

"Completed Dressing",

without frequently disturbing the patient. It depletes the visceral blood vessels by flushing the superficial capillaries —bleeds but saves the blood.

The circulation is thus favorably affected, congestion and pain are relieved, the pulse improves, temperature declines, the muscular and vascular systems relax and rest and sleep usually follow.

DIRECTIONS:- Always heat Antiphlogistine in the original container by placing in hot water. Needless exposure to the air or water impairs its usefulness.

Prepare the patient in a warm room. Lay him on his side and spread Antiphlogistine thick and as hot as can be borne over one-half the thoracic walls. Cover immediately with a cotton-lined cheese-cloth jacket, previously made and warmed. Roll the patient over on dressed side and complete the application. Stitch front of jacket.

Dressing should be made as rapidly as possible.

Never fail to secure full and original packages---Small, Medium, Large, or Hospital Size.

THE DENVER CHEMICAL MFG. CO.
NEW YORK.

ingham Medical College, Birmingham, Ala.; University College of Medicine, Richmond, Va.; College of Medicine, Baylor University, Dallas, Texas; Medical Department of the University of Mississippi, Oxford, Miss.; Memphis Hospital Medical College, Memphis, Tenn.; Chattanooga Medical College, Chattanooga, Tenn. Delegates from nine of these institutions were in attendance at the meeting. A motion unanimously passed, provided that from the present time until January, 1908, an applicant for admission to any college of the association, must have had two years in a recognized high school, or a certificate from an acknowledged preparatory school, besides a grammar school education. After January 1, 1908, the requirements for admission are to be a high school diploma, or a certificate of graduation from a recognized preparatory school, and the courses at the college will be for four years of seven months each instead of six months, as is the case with some of the schools at the present time. The election of officers resulted in the reelection as president of Dr. Christopher Tompkins, of Richmond, and the election of Dr. F. H. Frazier, of Mobile, as vice-president.—Exchange.

A new Medical College for Memphis, to be called The College of Physicians and Surgeons of Memphis, is projected. A lot of land, 115 feet by 333 feet, has been purchased and the college structure will be erected at once. Application for a charter has been made. The company is to be capitalized at $40,000, and will erect a handsome building to cost not less than $60,000. Dr. Heber Jones, president of the Memphis Board of Health, is to be president of the new institution and dean of the faculty. He will be assisted by a corps of physicians, surgeons, and specialists, among them being Dr. E. C. Ellett, Dr. J. A. Crisler, Dr. M. Goltmann, Dr. J. M. Maury, Dr. Richmond McKinney, Dr. William Krauss, Dr. J. L. McLean, Dr. George B. Livermore, Dr. A. G. Jacobs, Dr. Felix Paquin, and Dr. William Miller.—Exchange.

Mercurial Inunctions in Syphilis.

In America the profession as well as the laity have not taken so kindly to this method of administering mercury as they have in the European countries.

The same may be said with reference to the use of hypodermic injections of solutions of the salts of mercury. When the disadvantages and in some cases the disastrous results attendant upon a long-continued course of treatment by mouth are considered, it would seem that these methods of treatment are not sufficiently taught and emphasized among the profession at large.

Among the ill-effects of the internal administration of mercury may be mentioned the foul appearance and diseased condition of the teeth and gums, chronic catarrhal processes in the mucous membranes of the stomach and intestines, irritated and often diseased conditions of the liver and kidneys, and the anæmic or cachectic state of the general nutrition, due to the prolonged purgative and eliminative effects of the drug.

A very satisfactory method of prescribing inunctions is to take a piece of mercury ointment (U. S. P.) and thoroughly mix it with thick lather prepared from Listerine Dermatic Soap (Lambert). The skin area to be used should be at least seven inches in diameter, and should be well cleansed with the same soap, and the mixture should be rubbed in thoroughly for a half-hour.—American Journal of Dermatology.

Pure Milk for Infant Feeding.

The highest authorities agree that the best artificial food for a healthy infant is pure milk, from healthy cows, properly diluted, sweetened and sterilized. Milk of this description differs but slightly in its chemical composition from mothers' milk, and comes closer to an ideal food in every respect than any compound ever made. One of its essential features is that it contains fat which builds fat of a different and better quality than that produced by sugar or starch. Just why this should be so may not be explained, but nevertheless it seems to be the consensus of opinion of all pediatrists that this statement is true.

There is no absolutely fixed standard for the composition of either human or cows' milk, nor does it seem essential that the milk to be fed to infants be of an absolute standard, as long as its chemical composition does not deviate materially from the usually accepted standard of human milk, for the slight difference in carbohydrates may readily be corrected by addition of sugar, and experience has proven that this difference is readily overcome by the child in most instances, even if not corrected.

There is one reliable source from which a sterilized milk which meets all the requirements of the highest degree may always be obtained. This milk is supplied in concentrated form, a portion of its water having been evaporated. It is known as Highland Brand Evaporated Cream, the term "Evaporated Cream" indicating its resemblance to dairy cream in general appearance and usefulness. It is reduced in volume nearly two and one-half times. The peculiar sterilizing process is based on scientific principles, is safe, certain, exact and beneficial to the digestibility of the protein. It is absolutely perfect in every respect for infant feeding. The employment of Highland Brand Evaporated Cream as an infant food is exceedingly simple. All that is necessary is to add thereto water, which has first been boiled together with sugar, according to the age of the infant.

Daniel's Concentrated Tincture Passiflora Incarnata is a pleasant, reliable, harmless and potent calmative for diseases of the nervous system. It is prepared from the fresh, green fruit, leaves and vine, and holds in solution the natural sedative and hypnotic properties of the plant. It exerts a soothing influence over irritable nerves, and given in teaspoonful doses will remove the consequences that follow, such as relieving insomnia, quieting teething babies, calming nervous women during and preceding the period of child-birth, and giving a healthful cure to sufferers from hysteria, hypochondria and neuralgia. It is valuable in every form of nerve debility, because it rejuvenates and tranquilizes without a weakening reaction. It is nature's nerve calmative.

Massage by the Blind.

It is well known that the sense of touch is usually well developed in subjects deprived of the sense of sight, and that, in consequence, blind people are well fitted for the performance of actions for whose guidance fine tactual perception is sufficient. It is with a clear grasp of this fact that the Japanese have, we believe, for many generations employed the blind in the practice of massage. With proper instruction they are said to make most skillful masseurs, while their delicacy of touch renders their ministrations more pleasing than those of persens of more robust sensibility. The exercise is healthful for themselves, both physically and mentally, the pursuit of an active profession giving them an interest in life they are not likely otherwise to obtain. In some Continental countries the Japanese example has been followed, though as yet we have not heard of any blind masseurs in England. In St. Petersburg a regular course of two years' instruction in anatomy and physiology is given to blind pupils to fit them for this occupation, and much of the massage of the Russian capital is in the hands of those thus trained. In Brussels, Leipzic, Brunn, in Austria, and other places there are schools for the training of the blind in massage work, and in America, in Philadelphia, there is a

Gastric Irritability

BURNHAM'S CLAM BOUILLON.

In inflammatory, ulcerated and disturbed conditions in general of the gastric membrane, Physicians will find

Burnham's Clam Bouillon

(Absolutely Free from Any Preservative)

an acceptable and soothing nutrient. It gives the greatest amount of food energy with the least labor for the digestive organs. The rapidity with which it is absorbed gives the stomach walls a longer period of rest than can be secured through the use of ordinary nutrient agents.

It has been known and prescribed for years by many prominent Physicians. It presents an appetizing appearance and a tempting odor. It is a decided change from the ordinary delicacies for the sick room. The juice of the clam is strengthening in its effect both to the stomach and the nervous system. It is bottled in glass and sold in pints and half pints. This assures not only cleanliness and convenience in the serving, but perfect purity and freshness while using in the sick room. All the leading apothecaries and grocers sell it.

E. S. BURNHAM CO., Manufacturers and Packers, 53 to 61 Gansevort St, New York

school of the same sort working with considerable success.—Medical Press and Circular.

A physician who was always remarkably emaciated recently had typhoid fever. After recovering he met a friend who had not heard of his illness.

"Yes," remarked the lean doctor, "I've just been sick and lost twenty pounds."

His friend, wishing to express surprise at not having been informed before of the doctor's illness, said:

"Is that possible!"

And now you can't convince the lightweight man that his friend was not poking fun at him.

Heavy Golds.

The rheumatic and grippy conditions which so frequently accompany heavy colds are sometimes overlooked.

By the prompt use of Tongaline the irritating features of these conditions are ameliorated and the congestion is relieved, while the great stimulating action of Tongaline on the liver, the bowels, the kidneys and quickthe pores,ly expels the poisons which are the cause of the trouble.

Histology of the Wheat Berry.

A study of the structure of a grain of wheat reveals a veritable store-house of practically all the food elements essential for the conservation of every energy of the human body. The outer covering of the wheat berry consists of two coats, each being composed of a woody fiber; next comes a thinner coat of similar nature characterized by a peculiar net work of fibres and tubes, the arrangement of which very much resembles miniature cigars laid side by side; this is succeeded by another covering of the same constructure but of greater tenuity. Within these outer coats is contained the nutritious part of the berry. First there is a framework of cells enveloping the white portion of the flour. These cells are filled with certain nitrogenous bodies, albuminous in character, and phosphatic salts, chiefly potassium and magnesium with smaller amounts of lime, soda and iron. This covering of cells, so rich in protein and phosphates, is known as the gluten coat and is readily outlined if a cross-section of the wheat berry is treated with ammonia sulphate of copper which changes the color to green (phosphate of copper being formed) but does not affect the starch in the interior. Except at the germ end, where there are certain organic forms, the space within the gluten coat contains a loose frame-work of cellular tissue filled with starch granules. These are principally of a coarse formation but some of the cells are exceedingly minute and these latter cells contain some albuminoid constituents.

Thus we find the wheat berry in its native state, is composed of all the ingredients necessary for supplying the tissues with adequate food elements for the conservation of the vital forces. The modern method of manufacturing high grade flour has for its chief object the production of the whitest flour regardless of any sacrifice of the food value of the wheat berry. In the effort to supply this demand for an esthetic product it was necessary to separate the gluten coat of the wheat berry as waste material, thus eliminating the phosphatic elements entirely and largely reducing the quantity of the pro-

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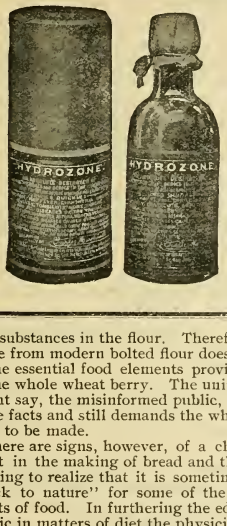

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tein substances in the flour. Therefore white bread made from modern bolted flour does not contain all of the essential food elements provided by nature in the whole wheat berry. The uninformed, or we might say, the misinformed public, is ignorant of these facts and still demands the whitest flour possible to be made.

There are signs, however, of a change of sentiment in the making of bread and the public is beginning to realize that it is sometimes well to go "back to nature" for some of the life-giving elements of food. In furthering the education of the public in matters of diet the physician is the highest authority that can be consulted and therefore he should keep himself well informed on this subject. The Battle Creek Breakfast Food Company, makers of the "whole wheat" product Egg-O-See, desire every physician to be made familiar with this food. Egg-O-See is made from the very finest grade of California wheat and every essential of the wheat berry is preserved. In addition to this the process of manufacture eliminates all unclean handling and the food reaches the consumer in a state of perfect cleanliness sealed in inner-lined packages.

Dr. Faure, the eminent French surgeon, has published his observations resulting from his visit to the United States. The magnificence of the operating rooms of our hospitals astonished him, the one in Mount Sinai Hospital in New York city being the handsomest he has seen. The excellent system of nursing in America especially excited his admiration. On the whole he is an appreciative critic of American surgery.

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No physician can possibly be ignorant of the many advantages presented by the absolutely reliable active-principle assay from the crude drugs.

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The artic region as a sanitarium for tuberculosis patients is considered in American Medicine by Dr. Frederick Sohon, of Washington, who has made two voyages to the North in connection with the Peary expeditions. He says this location is ideally the place for treating tuberculosis on account of the almost perpetual sunlight. It is dustless, the air is pure and dry and the unusual scenes and environment stimulate

the desire for exercise and muscular development. The exercise is a general and mental tonic. He is inclined to believe that a Greenland sanitarium is not only a medical possibility but a practical business propoition.

Dr. Simmons and the Octopus Again.

I have a letter from one of the best known medical editors in the South, from which I extract the following. He wants information, and I give it:

"Why those in authority in the American Medical Association ever made him (Simmons) editor of the journal, I never could understand. It might be accounted for in this way: A man thoroughly capable of editing and managing the Journal of the A. M. A. would have to make a great sacrifice, financially, to accept the position. To make a success of the Association, they ought to pay a $10,000 salary, and remove Dr. Simmons immediately. As long as they pay only $5000 a year they can not expect to get a very high-class man for the position."

It was a put up job; a cut and dried ring job for Simmons, all American competition for the position being prevented by a ruling of the Board of Trustees, that the editor should not engage in practice, or any other kind of work. Of course, no capable man could afford to give up his practice for a $5000 salary, and this effectually closed the doors and narrowed the selection down to a class of men who could do so, or who had no practice to give up. I say "American competition"; Dr. Simmons is not a native American; he is a foreigner; McCormack says he is an Englishman My information from Chicago is that he is an Irishman, and was an attache in some capacity of Dublin Castle. I presume he has taken out naturalization papers and can vote. He was a homeopathic practitioner from 1882 to 1894, when he received a diploma from Rush. Father Davis, who founded the Journal and gave it a high character, did a large practice and was teacher in the Northwestern Medical College. The great Hamilton, who succeeded him and wore his mantle with honor and renown was, in addition to being editor of the Journal, Professor of Surgery in Rush; Superintendent State Insane Asylum; Surgeon M. H. S.; President of the Illinois Historical Society, and besides did a large general practice. It was not required of them to give up practice. The place was "fixed" for Simmons by one Priestly, so I am informed by a Chicago physician of world-wide celebrity.—Texas Medical Journal.

On the Causes of Dysuria in Women.

Knorr (Festschrift fuer Olshausen) reports the results of over three thousand cystoscopic examinations in women. One out of five patients that came to his polyclinic had urinary symptoms and one out of eight of them had a chronic cystitis of the neck Gynaecologic diseases were responsible for the trouble in only a small percentage of the cases and in these it was not always easy to distinguish which of the conditions was primary.

The two most common bladder affections were cystitis colli and pericystitis. The causes of cystitis colli are either non-infectious such as venous stasis or due to infection almost always from the urethra by gonococci and colon bacilli. The treatment is local and must be applied directly to the neck of the bladder. One per cent. silver nitrate is applied after eucainization. This is repeated every two or three days. After less than half a dozen such applications symptoms usually subside.

Pericystitis is recognizable by the cystoscope by fine lines and occasionally by bands and ridges in the bladder wall, particularly marked when the viscus is distended. The therapy of this condition will be primarily a dilatation ad maximum of the bladder with fluid. Should this fail to break up the strands an operation may prove necessary.

Goitre, with a Report of 182 Operations Upon the Thyroid.

Dr. Charles H. Mayo, of Rochester, Minnesota, said (Southern Surgical and Gynecol Association) that surgery of the thyroid was increasing. These operations were as satisfactory as any performed, giving relief with brief disability. In fifty cases the mortality had fallen from 40 per cent. to less than 3 per cent., Kocher's percentage being 2. Accessory glands, like branchial cysts, were more often found in the lines of hypoblastic inversion. The lymphatics served as ducts. Total extirpation was followed by cachexia in from fifty to seventy per cent. of cases. Graves's disease was probably due to an oversecretion or perverted secretion, the glands showing a general or local condition of cell activity.

The great majority of enlargements in young people responded to medication. Part of the benefit obtained in the removal of the sympathetic was due to cutting the lymph channels draining the thyroid. During the past seventeen years the Mayos had operated upon 182 thyroids, with 9 deaths. Of these, 57 were cases of well-marked Graves's disease, with 7 deaths in all, and but 1 in the last 23. Of these cases, 50 per cent. made an early recovery; 25 per cent.

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did so during several months. The remainder were improved, but had occasional relapses of a temporary nature. Among the remaining 125 operations representing cysts, colloids, parenchymatous, and 5 malignant tumors, there were but 2 deaths, one from pneumonia, the other from tracheal collapse, on the third day following extirpation of a carcinomatous goitre. Cocaine was used in 13 cases, but ether anaesthesia preceded by morphine and atropine was the rule. The head was maintained in the high position. The incision was usually transverse. Parenchymatous enlargements and some colloids were extirpated; cysts and encapsulated growths were enucleated. Saline solution was freely given after operation.

Enteric Fever: Its Pathogenesis and Relation to Blood Conditions.

In the Glasgow Medical Journal Ferguson discusses its relation to the body effects. Two classes of toxic products are distinguished: the intracellular and the extracellular toxines. To the former may be attributed the local lymphocyte proliferation and microbic changes in the immediate vicinity of the bacilli; to the latter, the fever and acute degenerative changes in muscular tissues and solid parenchymatous organs. The central zone of infection is the lymphoid tissue of the intestine, and co-relatively that of the mesenteric glands and spleen. The media of general infection are two: the lymph and blood. The preponderance of activity of one or other of these two channels determines the symptomatology of the disease. This is borne out by experience, both clinical and pathological. Apart from the action of other organisms capable of producing necrosis, it can safely be maintained that the bacilli are themselves able to initiate tissue necrosis. This is evidenced by the presence of islets of necrosis found surrounding small masses of organisms in glands, spleen, and liver. No system in the body entirely escapes the effects of the diffused extracellular toxines; the respiratory, nervous, and muscular systems shew these effects in varying degree. Cellular proliferative reaction occurs in the lymphoid tissues and organs as the result of their invasion by the bacilli. The mononucleated cells of the reticulum as well as those of larger size noticed in the vicinity of the Malpighian follicles of the spleen and sinuses of the central (cavernous) system are notably increased. On the other hand, a strong chemiotactic influence is exerted against the polymorphonuclear class of leucocyte. This variety of cells, even in comparatively early stages, are found undergoing active destruction in the splenic pulp. The apparent concentration of the blood in the early stages of the disease may be ascribed to the fever, diarrhœa, and sweating. It often coincides with a slight but transient polycythæmia. Diminution in the red corpuscles soon, however, sets in, and in the majority of cases their numbers fall by the end of the third week to 3,500,000 per c. mm. At defervescence this may even be further reduced—i.e., to 2,500,000 per c. mm. The average weekly loss of red cells per c. mm. amounts to about half a million. The proportion of hæmoglobin in the blood is found to be proportionately reduced, 60 to 75 per cent. being frequently registered at the end of the active period. Nucleated red corpuscles appear after hæmorrhage has occurred. Aside from the initial leucocytosis, which is always of brief duration, the predominant feature in uncomplicated enteric fever is leucopenia. This is always a reliable guide to the severity of the infection. The weekly estimates of leucocytes shew that they reach their minima at or about the conclusion of the third week of the disease. It is only after the lapse of ten to twelve weeks that they regain their normal number and ratio. The increase in mononucleated cells, both of the lymphocyte and medium-sized hyaline class is remarkable. The proportion of these seldom falls below 27 per cent., and ofttimes reaches as high as 50 per cent. of all the leucocytes. The proportion of polymorphonuclear and eosinophile cells is reduced during the active stage. The disappearance of the eosinophile cells and a general reduction in number of the leucocytes is a most unfavorable sign. The occurrence of suppuration, pneumonia, or perforation may cause the leucopenia to give place to a leucocytosis; but this is by no means invariable. It, however, is an index of the reactive potentialities of the leucocyte-forming tissues. The absence of leucocytosis after perforation may be ascribed to failure of the organs concerned, by reason of the general debilitated state of the patient; to localization; or to infection being produced by organisms which possess no positive chemiotactic influence upon the polynuclear cells.

An advertisement for bed bugs by the English School of Tropical Medicine caused much indignation, says the Medical Press. The people of Liverpool claimed that there were not five hundred bed bugs in their city and predicted that the doctors would be disappointed in receiving any specimens of the nocturnal wandering insect. But the civic pride was humbled, for the first day the Medical School was simply inundated with bed bug merchants.

The Charlotte Medical Journal.

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The Family Physician and Appendicitis.

By Dr. W. C. Lipscomb, Crockett, Texas.

We often ask ourselves an important question and defer solution to a more opportune time. Such was the case with the writer until recently faced with the question of the proper management of a case in a child whose parents were away on an extended visit to distant cities, thereby increasing the perplexities of the situation.

The child, a boy of 10 years of age of athletic habit and vigorous appetite, had eaten freely in the afternoon of apples, grapes and hickory-nuts. Colicy pains following in the evening, castor oil was administered. Pain and tenderness at McBurney's point and fever persisting it was pronounced a case of appendicitis. The symptoms were very mild from the beginning; the patient bright and cheerful, consenting most reluctantly to confinement in bed, insisting that he was well enough to get up. Indeed so mild were all symptoms that my consultants, Drs. Wootters and Stokes, concurred with me in the view that each day might mark the subsidence of the pathologic process until in all ten days had elapsed with little alterations of symptoms. We then decided that surgical intervention was demanded, and accordingly placed our patient under the care of Prof. Jas. E. Thompson, of Galveston. On the afternoon of the 11th day he operated, evacuating a pus sac containing about one and one-half ounces of pus, removing the diseased appendix and securing a very thorough drainage, both anteriorly and posteriorly. And thus after much doubt and deliberation as to what was the wisest course to pursue the case was promptly relieved in the only way possible.

I have not had many cases of appendicitis; those occurring in the earlier years of my practice were diagnosed perityphlitis and treated accordingly. They all recovered. I have had some recurrences and some abscess formations which ruptured into the intestine or were incised simply through adhered tissues. I have seen some unexpected recoveries without surgical interference, seemingly impossible of explanation. In a few cases I have seen rapid collapse. On the whole my experience with the disease treated medically had been such as to incline me to that side. I must say, however, that most of my cases were of short duration or seen late when undergoing resolution or fortunate rupture and the momentous question of operation was not put so strongly. In the present and future, however, with the advances that have been made in the study of this disease, the greater accuracy of causative and pathological knowledge and the achievements of modern surgery this is the question to be answered by the physician, and in no uncertain words; and I have great satisfaction in having at last settled the question in my own mind.

Nature is wonderful and admirable, but Metchnikoff who has given us much food for thought in his advanced researches, has shown us that she has "disharmonies," prominent among which is this vestigial organ in man, the appendix an organ without a use, but peculiarly constituted to become an effective menace to life throughout our entire existence. Patulous at one extremity to receive infectious matter, of low grade glandular structure and defective blood supply, and consequently of low resisting power it easily becomes the open door for the admission of infection. This is one of the strongest points in the consideration of this subject upon which the others hinge.

"There is no medical treatment for Appendicitis." This is the dictum of Osler, indorsed by other advanced observers and writers, both medical and surgical. Catarrhal cases recover under rest, but there are no means of knowing when a case of this kind may become perforating or gangrenous. If apparent recovery takes place there is most likely a more vulnerable condition of the appendix, and when recurrence takes place a greater danger to life. It is variously estimated that 14 to 25 per cent. of the cases of appendicitis are fatal. If the calculation is based entirely on the individual—the only true way to estimate it, very likely the larger figures would hold good. This is all the medical plan of treatment offers. On the other hand surgery has achieved a life saving record. For data on the subject and a most elaborate, able and convincing argument, I would refer the reader to Jacobson in The Operations of Surgery. I believe the position he takes will be verified in the future to be correct. We owe our better knowledge of this condition to the skill and boldness of the surgeon, and we should accord to him his full mede of praise. We should endeavor in every way to develop our diagnostic abilities and allow no cases to escape our observation. I am almost inclined to believe that if there is doubt the operation is justifiable, as it removes a source of future danger. Our patients should be made to know the true status of

the question, so that in the event they decline surgical intervention the blame would not be attached to the physician.

As to the time of operating, the patient's life is in danger until relieved, so that no time should be lost. As above stated we have no means of knowing when a seemingly mild case may become a rapidly fatal one, and there is more risk in delay than in the knife of the skilled operator.

In addition to increased chances for recovery from early operation there is the great saving of suffering, anxiety and time. It is of course understood that only the skilled and experienced surgeon can achieve ideal results in this field. Without special ability in this line the patient had best be intrusted to nature and careful medical management.

Management of Compound Fractures.*

By A. David Willmoth, M. D., Professor of Surgery and Clinical Surgery, Medical Department, Kentucky University.

My excuse for presenting a paper to this society on this subject is two fold; first, there has not been a paper read before this society on the above subject in months or years; second, in the rapid progress of surgery in almost all lines, but perhaps most markedly in the direction of the internal organs, we have not kept up our stock along this very important line.

Surgical literature is almost monopolized with lengthy articles on operations affecting the stomach, liver, kidneys and other abdominal viscera, while fractures, a condition that has to be treated by both the surgeon and practitioner, rarely gets a mention. Operative surgery is the surgery of today, and the non-operative has been more or less ignored.

Strange this may seem when fractures are just as frequent as they were formally, and demand the same careful skill and attention in their management if good results are to be achieved.

Many of us can recall the time when fractures and dislocations formed a much larger part of the surgeons knowledge, and composed a very large part of his teaching course, while at the present time there is a great temptation to those in charge of surgical wards to devote their attention to the operative cases, and leave the fractures too much to the care of their assistants. The extreme rapid progress of modern surgery has been due to our ability to maintain wounds aseptic, and in no department has this brought about a more radical change than in the treatment of compound fractures.

Only a few years ago a compound fracture constituted almost a positive indication for the amputation of the patients limb. Think of the many thousand limbs that were sacrificed during the civil war of only a few years ago (and the equal number of cripples made), many of which could have been saved if the principles of asepsis had been understood then as they are today.

Oscar Klauber, of Prof. Wolfler's clinic in Prag, recently in a most excellent article called attention to the fact that in pre-antiseptic days the surgeon had simply a choice between a primary amputation and doing nothing, the mortality in those days being from 40 to 50 per cent.

Billroth reports 148 cases of compound fractures treated before the work of Lister was published in 1867, with a mortality of 41.1%, while in the same authors clinic and in the clinic of Von Bruns after that time the mortality was reduced to 9%.

It was the German surgeons in particular who protected by the teachings of Lister, that did more and more operative manipulations in the treatment of compound fractures until Volkman's de'bridement method was brought prominently before the profession with such brilliant results in 1877. The reaction had to come, but came very slowly, and the first observations on the good results of the conservative treatment were due to the fact that the patients environments were such that they didn't permit of any treatment at all, or at least of a very limited amount, and the surgeon who lamented his inability to give the compound fracture more extensive treatment was agreeably surprised to find that his patient did just as well or better than with the Volkman de'bridement treatment.

This observation reminds one of the story of the noted Ambrose Pare's experience on the battle field when he and his assistants were unable, owing to the great number wounded, to carry out the line of treatment that was used at that time (pouring boiling oil into the wound or something else equally as painful), and they were surprised to find that those unattended did better than those that received attention. This led him to formulate his conclusion of non-interference, which is practically the treatment of many kinds of wounds today.

But the management of this class of wounds had been so disastrous before the days of asepsis that when it was so completely revolutionized it was hard for the surgeon to tell what part of his treatment was the essential feature. However, experience began to accumulate with less radical measures and simpler treatment, until all surgeons were compelled to admit that while the Volkman treatment was far better than

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the treatment of pre-antiseptic days, it was not to be compared to the simpler and more modern treatment of conservatism.

Probably few of you have took the time to think over the matter, but you will find that the Lister treatment of compound fractures with pure carbolic acid, mere reduction of the fracture, little or no cutting done, the wound sealed with gauze soaked in the acid is practically the treatment of today, and while it was published in the Lancet in 1867, it is the first detailed report of the healing of a wound beneath a blood clot.

With this report of Lister the pre-antiseptic treatment of Pare by doing nothing and the conservatism of Lister were forgotten and surgeons again began the meddlesome interference with this class of injuries.

In order to treat a compound fracture scientifically we must first find out the cause that acted to make the fracture compound, whether the result of suppuration, or the extension in depth of a coexisting superficial wound, or by the formation and fall of eschar, or compounded from the start, as the result of direct or indirect violence.

For the sake of study there is to my mind no simpler classification than the last, for in the one by indirect violence you have a wound made from within out by the sharp end of bone, and may be confidently expected to heal as readily as the surgeons wound, and transform a compound into a simple fracture. While in those of direct violence the opposite is true, a large contused wound that could not heal. The two differ so widely in prognosis and treatment that I shall seek to emphasize the distinction in separate description, knowing, however, that many of the difficulties and dangers in the fracture the result of direct violence may exist in those the result of indirect violence as the result of conditions that are independent of the mode of production.

In the treatment of compound fractures we have two factors to consider that we don't have in simple fractures, viz: Saving of the patients life and the saving of the patients limb, and we do not care so much the first few days about the perfect adjustment of the limb as we do in the simple fracture. The first question that arises when we see a compound fracture is, Shall we amputate, or shall we treat it on the conservative plan? The first question can usually be answered by considering the following two points: The blood supply to the limb, and the extent of the comminution to the bone so that in case healing did take place the limb would be of no service, and in the consideration of these points I wish to emphasize the fact that no where in surgery should conservatism be practiced to such extent as in the treatment of bones, this is speaking of those seen shortly after the injury is received.

If a great length of time has elapsed then a third factor comes in for consideration, viz., sepsis, and this is the first and the absolutely essential feature in treating this class of injuries, for it is not a question of preventing infection, but the destruction of infection that has gained access to the wound before the surgeon gets to see it.

Unless the wound be rendered aseptic the inflammatory process involves not only the soft structures but the medulla of the bone as well, and an osteomyelitis is the result from which the patient may loose his life, either from the infection in the bone or from metastatic processes in other parts of the body.

While we are especially anxious to secure asepsis we must do this with something that will not retard the healing process, or in other words will not kill the osteoblast that go to make up the new osteoid structure which will later become the new bone. It is here that I wish to sound a note of warning regarding the use of strong antiseptics such as bi-chloride of mercury to render the wound aseptic, for it is a well known clinical fact that this agent will destroy embryonal cells in any granulation tissue, and it is this granulation tissue on the end of bone that may serve to prevent absorption of material that would cost the patient his life if allowed to go into the patients system.

In the opinion of the essayest this agent should never be used for the reasons given, but some of the weaker ones used that have been proven to do all that is required.

This brings us to the consideration of the conditions proper and I will first speak of those that are simplest in their nature, viz., where the wound is small as in those the result of indirect violence, the skin merely being button holed, it is a great temptation to the surgeon to clean the skin, replace the ends of the bones if possible, or perhaps use a syringe to wash out the blood clots from the little opening, then to put on an aseptic dressing and let the case alone. This may do in a small class where the surface that is injured has no clothing, etc., over it, but even there the surgeon may have strips of the periosteum between the broken ends of bone, and it is, to say the least, a step in the dark.

In the majority of cases this treatment would be ineffectual, and the surgeon had far better enlarge the wound with his knife or scissors so that he can see what he is doing, then with an aseptic solution such as normal saline, which is also antiseptic, or,

if he prefers, carbolic in the strength of 1-40, or even 1-80 would be strong enough, to run in enough to be sure that nothing remains behind, being careful at the same time to see that he does not use force enough to drive the solution out into the muscular planes. (this can be prevented by using a soft rubber tip on the end of the irrigator, such as a catheter) then to close the wound it should heal as readily as any operative wound.

If the wound is considerable then with the patient under chloroform the wound should be enlarged to give the surgeon ready access to the most dependent part, so that all blood clots and pieces of bone can be removed. The field can easily be kept clean by applying a tournaquet.

All pieces of bone should be removed that are entirely loose from periosteum, and the end of the bone should receive careful attention from the surgeon and if dirt is found that can not be removed by washing, he should either saw off a thin shaven from each end of the bone or remove it with a gouge or heavy curette, and where the end of the bone has been forced into the ground or any place where infection is bound to follow the entire wound should be treated by swabbing out with pure carbolic acid, followed with alcohol to counteract the effects. Care must be exercised to prevent the acid from coming in contact with the skin edge, for there it would retard the growth of new skin. After this the ragged edges should be removed and the wound dressed by putting in plenty of drainage and, if necessary, to make a counter opening to prevent the serum from accumulating in the dead spaces.

I believe in the teaching of Klauber that this packing should be iodoform gauze, and where the infection is highly probable the gauze should be carried between the ends of bone and the suturing of the bones, if done at all, should be a secondary consideration, a treatment not so well understood in this country as in Europe.

In the ordinary case after we have washed out and feel that we have removed the infection we should arrange to cover the bone either with periosteum or where this is impossible to cover it with a flap of muscle, for here our effort is to render the fracture into a simple one as early as possible, and where the counter opening is made in these cases it should only be deep enough to drain the cellular tissue and not come through to the site of the fracture.

There is still a class of cases where the injury is extreme, and where the treatment ordinarily used as described does not apply, but an amputation has to be decided first of all. In this class, of course, comes those where the leg is partially or completely torn off, those where the bone is badly comminuted and the main vessels and nerves are destroyed, those where the injury has been caused by machinery, where the bone is badly comminuted and the soft structures are ground full of greasy dirt, again in old people and those badly run down from constitutional disease, where the bone is badly comminuted the best thing is to try and save the life, and to do this amputation at the time offers the most.

With these exceptions an effort should be made to save the limb, and because the main vessels and nerves are cut does not mean that the limb must come off.

If in spite of the efforts put forth the wound shows infection, then frequent changing of the dressings and thorough irrigations must be carried out if we expect to save the limb. The injection of Iodoform, Balsam, Peru and Oil have served me a most valuable purpose in this class of cases.

If the wound continues to show signs of sepsis, the wound should be cleaned out, including the medulla of the bone, with a curette, kept drained and a continuous irrigation employed, to prevent any of the poisonous material from accumulating in the wound and furnishing a pabulum for the bacteria and to allow absorption to take place to give the patient sepsis. If this fails and the patient begins to have rigors and loose ground an amputation should at once be done, and offers the most if done through or above the joint next above the injury.

Of course in all compound fractures the limb must be kept in some form of splint that will immobilize the fragments, for delayed and non-union are common in this injury. This splint must also have the advantage of allowing the wound to be dressed, and to my mind there is no form of splint so well adapted to the needs of all, and in the reach of all, as rods of mallable iron that have been bent so as to make a window at the fracture site, and incorporated in the plaster dressing. This makes a dressing that holds the limb in perfect position while the surgeon changes the dressings, something that can not be said of any assistant or moveable dressing that has to be applied at every dressing.

Bibliography: Von Bergman's System of Surgery, Volume 3.

Surgical Treatment, Cheyene and Burghard, Volume 5.

Annals of Surgery. 1904. Volume 10. Fractures and Dislocations, Stimson.

Schudder on Fractures and Dislocations, 4th Edition.

Rose and Carless Surgery. Sixth Edition.

Sanitation.

By Robert C. Campbell, M. D., Shreveport, La.

The Medical Profession should present to Society active evidence of absolute solidity on all questions affecting the public health. This subject is far reaching and of vital importance to the welfare of the public, it is imperative that we should unitedly insist that early and continuous energetic sanitary measures be used throughout the spring, summer and fall.

Sanitation and the extermination of the mosquito are so closely united that they cannot be separated, and in placing the city in a first-class sanitary condition you destroy a very large percentage of the breeding places of the mosquito.

There is no specific plan that can be laid down for the sanitation of all the towns and cities in the State, as on account of location and peculiar surroundings and conditions of each place they require different methods to be considered and carried out according to the surroundings.

In the northern and western part of the State active sanitary work should commence not later than the first of March and continue until the first of November. In the southern and eastern portions of the State active work should begin on the first of February and continue until the first of December of each year.

Underground sewerage should be used wherever it can be done; fill or drain all ponds and pools, straighten and clean all ditches and keep them clean and clear of grass and weeds. Straighten the spring branches and keep the sides free of brush, weeds and grass; frequently flush the sewers and gutters of the paved streets, and the gutters of the unpaved streets should be closely watched and kept free of weeds and grass and thoroughly oiled every ten days if any little pools of water are found in them; oil every ten days ditches and any pools that cannot be filled or drained; watch and keep the culverts clean and well oiled, as clear pools will form in them, producing favorite breeding places for the most quito; abolish all wooden culverts.

Crude petroleum is the best and cheapest material for use on ponds, pools, ditches and culverts. The Beaumont oil is very effective in destroying the wrigglers and has considerable disinfective properties and it can easily be spread with sprinkling pots.

Wholesome drinking water is a serious matter for a large portion of the State; consequently, cisterns are extensively used. They are also favorite breeding places for the Anopheles and Stegomyia Fasciata. All cisterns should be permanently screened with mesh wire of not less than eighteen strands to the inch; prohibit the use of barrels and tubs for catching rain water, as they will not be kept screened or oiled. Have the railroads keep their catching basins clean and permanently screened; keep the grass and weeds closely cut in alleys, streets, sidewalks and vacant lots.

Closely inspect all premises and see that all holes or depressions that will hold a little water are filled, and see that there are no pools under the houses. Do not allow any unused vessels or tin cans thrown out and left in the back yards. Vessels used for watering stock or fowls should be emptied and cleaned every twenty-four hours.

Look after the roots of your houses—the gutters are frequently obstructed and waste pipes filled by the English sparrows building their nests in them; consequently, water is retained in the gutters long enough for the mosquito to breed by the thousands. That is one source of the supply of the mosquito in the second stories of the resident portion of the city. In the business portion drains of the flat roofs frequently become obstructed sufficiently to form little pools of water on the roofs which remain for some time; a very convenient location for the mosquito to raise her brood for supplying the second, third, fourth and fifth stories with the pestiferous winged insect.

Clear water ponds and branches that have fish in them should not be oiled, for the minnows will destroy the larvæ of the mosquito, but the sides and edges of such ponds and branches must be kept free of brush, weeds and grass to allow the minnows full sweep and access to all shallow places where the mosquito deposits her eggs.

The important matter of sanitation should not be left, "as it is often done," in the hands of those whose knowledge and ability are along political rather than sanitary lines, and the public is inclined to regard a Health Office of any kind as a political plum to be gathered by any one who can bring the greatest amount of political influence to bear, regardless of his ability or fitness to properly fill the position. Such should not be the case. It is absolutely necessary to place such work on a sure foundation and the value of experience should be recognized and every community should try to obtain and retain the services of those who have shown their ability in the various branches of the public health.

It is also important to know the different species of the Mosquito family, as they have been shown to be very energetic in conveying diseases to the human race.

Let us teach the laity to fear the pernicious mosquito more than they do the hornet, as the bite of the mosquito is far more serious than the hornet's sting.

It is the duty of every physician to im-

press upon their patients and friends the importance of keeping their premises in a first class sanitary condition and not to overlook or forget to destroy all mosquitoes that may invade their homes. Strong formaldahyde gas will kill the mosquitoes if the room is made very tight. It will drive them out if there is an opening for them to get out. It should be used once or twice a week.

If the laity only knew how much sickness, pain and sorrow they would save themselves and their loved ones by the destruction of the mosquito, they would arise in their might and lend us a helping hand, and very soon the dangerous, molesting winged insect would be exterminated. Then we would sleep peacefully, with no fear of awaking in the morning to find some of our loved ones in the grasp of the deadly malarial or yellow fever. What a relief it will be to know that we need no longer fear malarial or yellow fevers when the disease bearing insect is destroyed, and it can be exterminated by proper energetic sanitary measures.

Then we can say to the Culex, Anopheles and Stegomyia:

Goodbye to the deadly lance that is in your mouth,
The gentle buzzing that is your sigh,
The happiness that your departure will bring!
Ah! pernicious Insecto, not too soon can you fly,
We gladly tell you goodby.

Suppression of Urine.

By G. Paul LaRoque, M. D., Lecturer and Bedside Instructor in Surgery, University College of Medicine, Richmond, Va., Formerly Instructor in Surgery, University of Pennsylvania, and in Woman's Medical College of Pennsylvania; Chief Resident Physician University Hospital; Assistant Surgeon Philadelphia Hospital; Anesthetist and Clinical Assistant to the Professors of Surgery, University of Pennsylvania, etc.

True suppression of urine implies a condition in which excretion from the renal tubules is entirely or almost entirely suspended. It must be distinguished from retention of the excretion in the lower urinary tract, i.e., the bladder, ureters and renal pelvis, though such retention may be a cause of true suppression.

The causes of suppression are (1) *Non-obstructive*, due to causes located primarily in the kidney and not dependent on lesions of the lower urinary tract. (2) *Obstructive*, due reflexly to obstructive lesions in the lower urinary tract.

Non-obstructive suppression may be due to: Reflex vaso motor or circulatory disturbance resulting from *traumatism*, affecting the general nervous system with the production of severe shock or collapse; or to the genito urinary apparatus or the structures intimately related to this through nerve connections. As examples may be mentioned the suppression following severe head injuries, thoracic or abdominal wounds and in old people such accidents as fractured femur, etc. The injuries to the genito urinary apparatus productive of suppression may be either mild in type such as sometimes occurs after urethral and vesical instrumentation (urethral fever) or to the more severe injuries directly to the kidney such as contusions, gun shot or stab wounds and the surgical traumatism during operation on these organs.

The indirect causes of reflex disturbance include the reflex suspension of function in a sound kidney where an irritative or obstructive lesion is located in the opposite kidney or ureter, and even sometimes in the bladder. The anuria of the diseased side in such a case may be of either reflex or mechanical origin. Total bilateral suppression results. Intra abdominal and particularly intra pelvic operative manipulations, through the irritation of the hypogastric and solar plexuses occasionally are followed by suppression. It also sometimes occurs in intestinal strangulation or other obstruction. A common cause is extensive cutaneous destruction by burns. This may act either reflexly, or through auto-intoxication, resulting from the retention of certain poisons which should be eliminated through the skin.

Degenerative changes in the kidney, such as malignant disease, large tumors, tuberculosis, cysts, the fatty degeneration of Bright's disease, cloudy swelling accompanying certain acute infectious diseases, the retention of nephrotoxins after ligation of the renal vein (this is even more often followed by suppression than is nephrectomy) the kidney breakdown of pregnancy, labor and the puerperium, the irritating action of certain drugs, notably carbolic acid, cantharides, corrossive sublimate, phorphorous, turpentine, ether, chloroform and in rare instances alcohol, are among other causes.

Passive venous congestion, extreme cardiac weakness—when the blood pressure is reduced to less than 40 Mgm of mercury (Whitacre) and finally starvation, from complete withdrawal of fluids are rare causes of anuria.

Suppression of urine *following anesthetization*, may be due to kidney weakness previous to anesthetization, to circulatory depression resulting from saturation with the anesthetic, exposure to cold and wet during and after operation, and frequently follows operations on the genito urinary tract, in this case acting reflexly through its nerve supply.

Rarely hysteria is a cause of anuria, more frequently is meningitis.

Obstructive anuria results from laceration or pulpification of the kidney, caculi, tumors, blood clots, plugs of mucous, pus, cicatricial contraction, old sclerotic inflammation in any part of the conductive urinary apparatus and long continued vesical retention from any cause. External pressure on the ureters from tumors of the surrounding structures, cicatricial contraction of periureteral tissues, particularly the scar lissue resulting from old inflammatory pelvic disease in women; and finally kinking, torsion or stricture in both ureters simultaneously, (or in only one if this is all that is present or functionating) and in rare cases, obstruction to the lower end of congenitally fused or artificially united ureters are other causes.

The *symptoms* may be of sudden or gradual onset. In addition to the anuria, are headache, gastric disturbances, constipation and the signs of impending or actual uraemia. There is auto-intoxication from retention in the blood of the poisons which should be eliminated. In one case reported by Main profound coma was apparently due to vesical retention. The retention may have been the cause of suppression and uraemia. The cause of retention was not determined.

Diagnosis.—Anuria may be differentiated from simple vesical retention by the introduction of a catheter, but it must be remembered that retention may cause suppression; and if the latter is of sudden occurrence with a bladder already full, the two may coexist. In such a case spontaneous urination or the introduction of the catheter again after a few hours interval, will settle the question.

The uraemia commonly seen as a terminal symptom of nephritis will always show the urinary characteristics (albuminuria, casts, etc.,) of nephritis. The uraemia symptoms due to mere reflex suppression shows no such urinalysis; indeed the small quantity of urine secured by catheter may be normal in quality.

The diagnosis of the cause of a given case of suppression must be determined from the history and concomitant symptoms and signs of the various causes enumerated. Unilateral suppression is determined by ureteral catheterization, or bladder segregation. Cystoscopic examination may note a few drops of urine flowing from one ureter, while the opposite orifice may be dry. Intravesical causes may be found, and in case of calculous or other obstruction at the ureteral orifices these may be seen. Obstruction higher up in these canals or in the pelvis of the kidney may be determined in some cases by the ureteral catheter. In general, however, it may be said, that when the suppression is total and not due to unilateral obstruction, the use of the ureteral catheter is scarcely worth while (Israel).

Treatment—The symptom itself is of grave import and aside from the underlying cause should be treated actively. Post anaesthetic and operative suppression should be guarded against by the smallest quantity of anaesthetic necessary, keeping the patient warm and dry during and after operation, and by affecting as little traumatism as practicable in accomplishing the purpose of the operation. After operation on the genitourinary organs, free diuresis should be secured and to this purpose drinking water or enteroclysis and hypodermoclysis of normal salt solution are beneficial. Circulatory depression is benefited by strychnine, digitalis and particularly nitroglycerine, the latter agent being distinctly useful. In all cases, active diaphoresis should be secured by hot packs vapor baths, in some cases pilocarpin hypodermically; and free purgation by the saline cathartics, especially calomel and salts is indicated. In the common form of suppression due to reflex sympathetic causes, hot poultices, cupping and other counter-irritants are useful, and it is here that high injections of *hot* salt solution into the colon, are doubly indicated. If shock be the cause, adrenalin chloride intravenously and strychnine and atropine hypodermically are indicated. The various operative procedures which have been beneficial in suppression per se, aside from those directed to its cause, are simple puncture, splitting the capsule, incisions into the capsule, decapulation and nephrotomy. These should not be performed until other less radical measures have failed, nor should they be postponed until the patient becomes moribund; though even then they have been successful. If no respone to medical treatment properly applied, occurs by the third day of total suppression, operative measures are indicated. Whitacre saw one case cured by a decapulation after eight days of total suppressian. The operation may be done under nitrous oxide or light ether anaesthesia, and if no cause is discovered in the kidney first operated upon, it should be repeated on the opposite side and the organs explored for local lesions. The operation does not insure against recurrence, in case of continuation of the cause. The writer's views as to the value of "surgical treatment of nephritis" were published in the Virginia Medical Semi-Monthly, Dec. 8, 1905.

Present Methods of Determining Renal Incompetency and Remarks on Surgical Treatment in the Presence of this Condition.

By G. Paul LaRoque, M. D., Lecturer and Bedside Instructor in Surgery, University College of Medicine, Richmond, Va.; Formerly Instructor in Surgery, University of Pennsylvania and Woman's Medical College of Philadelphia: Assistant Surgeon Philadelphia Hospital; Clinical Assistant to Professor of Surgery, University of Pennsylvania, etc.

The purposes of carefully estimating the powers of the kidneys are manifest. The questions to be solved are: (1) How many kidneys exist, (one may be congenitally absent, or have been removed at some time past). (2) What is the present pologihysic renal capability. (3) What is the probable chance that the remaining kidney may accomplish physiologic compensation in case its fellow must be removed. Upon the solution of such problems depends much of skill in diagnosis, prognosis and therapeutics.

The methods to be employed in such solution include, (1) an intelligent history of the patient as regards past and present diseases, particularly as regards injury and disease of these organs, (2) a thorough, general physical examination, taking particularly into account the circulatory apparatus (the intimate relation of diseases of the kidney and heart and vessels to each other is well known), the physiological reciprocating structures, the bowels and skin, and the great cooperative correllated metabolic organ the liver.

To solve the second and third questions, involves a study of the individual and combined functional power of both kidneys together and in case of contemplated radical treatment, of each organ separately.

The chief physical function of the kidneys is permeability. The most conspicuous vital functions of these organs are to select from the blood certain obnoxious substances, particularly the end products of metabolism and to excrete them into the urinary passages. There are other functions less thoroughly understood of altering certain substances taken from the blood, internal secretion, etc. The performanee of these functions is dependent upon continuity of renal structure, quantity and quality of blood supply, local and general blood pressure, a complex nervous mechanism and the specific vital properties of the functional renal elements, particularly its epithelial structures.

Various tests of these individual and combined functions, and of the total renal power have been applied with more or less practical, valuable results. Among the more recent of these are: the simple dilution test, the methylene blue test, the Phyloridzin test, and cryoscopy of the blood and urine.

The dilution test of Renal Function.—This has for its purpose determination of the permeability and excretory power, of the renal structures to water. The points considered to be of value are: (1) Delay in the appearance of increased excretion after the ingestion of large quantities of water. (2) Relative delay and difference in the amount excreted by each kidney separately. (3(Relative proportion of molecular concentration in the urine from each kidney separately as determined by cryoscopy.

The patient after emptying the bladder, is given to drink a large quantity of water at one time, and for several hours following, the urine is secured from each kidney separately, and measured and examined. This necessitates either ureteral catheterization every half hour or every hour, or the presence in the bladder of the divisor continuously.

Strous and Salvator attribute value to the test as to diuresis. Strous believes, from 55 cases, including five cases of movable kidney, that by this method, insufficiency was revealed long before it could be detected by any other means.

The methylene blue test of renal capability is based on the power of renal structures to transform and eliminate methylene blue after subcutaneous administration.

A sterile solution of methylene blue or indigo carmine is injected subcutaneously after cleansing and evacuating the bladder and the urine is collected every half hour from each kidney until the blue color ceases to appear. The time of appearance, intensity and duration of elimination from each kidney must be noted, Normally the maximum intensity of the coloration is manifested in one half to one hour.

The Phloridzin test.—This has for its basis, the power of normal kidneys, to eliminate sugar within a certain time after the subcutaneous administration of Phloridzin. It is dependent on transforming and excreting power and renal permeability.

After emptying the bladder 5 mgm of a sterilized preparation of phloridzin, (for an adult of moderate size) with an equal quantity of sodium carbonate to hold it in solution, are administered subcutaneously. The urine must then be collected from each kidney separately every half hour. Within one-half hour after administration, the normal urine should contain 0.3% to 0.45% sugar, and at the end of the second half hour about 0.06% less. In renal insufficiency, the quantity within the first half hour is less than this and the difference between the first and the second half hours is less marked. The sugar should be absent at the

end of four hours. In serious renal disease the appearance of sugar is delayed and elimination is prolonged, markedly reduced id quantity, or absent. The drug is harmless. Watson and Bailey find that in individual cases, the results are too variable to be alone trustworthy, but that in general, when combined with other methods of investigation, the test seems to possess some significance.

Cryoscopy.—The freezing point of blood and urine is dependent on its molecular concentration. This molecular content is maintained at a more or less constant point, largely through the selective and eliminative functions of the kidneys. Upon this basis, has been suggested and is now being studied, the freezing test as an index to renal capability.

Technique.—The urine to be examined for unilateral renal capability must be obtained from each kidney separately. For determining total insufficiency in bilateral kidney disease with a healthy bladder, the bladder urine may be used. The blood may be obtained from one of the superficial veins at the elbow, by means of a small trocar. The amount of either fluid required is from 10 to 20 cc. It must always be kept in a perfectly clean vial or test tube, and unless examined fresh, should be kept in a refrigerator to prevent decomposition.

The apparatus of Beckman consists of a large jar containing the freezing mixture (cracked ice and salt) into the middle of which is fitted a large test tube supported by the cover of the jar. In this central cylinder is placed a smaller test tube provided with a double perforated stopper through which is suspended a stirring wire or spiral, and a small thermometer, accurately graded in 1-100 degrees C., the zero point corresponding to the freezing point of the distilled water and frequently verified. Between the walls of the two central glass tubes, there is a space of about 1 c.m. and at the bottom 2 or 3 c.m. The tubes are prevented coming in contact, by a small rubber band around the top and bottom of the inner tube. The urine or blood is placed into the small test tube so as just to completely cover the bulb of the thermometer. The fluid is stirred occasionally by the wire or spiral passing through the stopper, and the ice and salt mixture is occasionally stirred by a rod. The column of mercury will at first fall to a point below the freezing point after which it will be observed to rise to a permanent level, (the freezing point) at which time the fluid will congeal. On account of the delicacy of the thermometer, care must be taken that it is not broken by stirring or jarring. The whole test should not require more than fifteen or twenty minutes in skilled hands, but is certainly extremely delicate.

Kummel from a study of 250 cases determines that in healthy individuals free from kidney disease, the freezing point of the blood is constantly between 0.55 degrees and 0.57 degrees below zero; 0.56 degrees C below zero, being taken as the normal. That of the urine is quite variable between 1.2 degrees C and 2.3 degrees C below zero. He concludes that a freezing point for the blood below 0.55 degrees less than zero, or for the urine below minus 1.0, is indicative of renal insufficiency.

Strauss suggests that in applying the test to urine in cases of bilateral renal disease, that a mixed specimen of the total 24 hours bladder urine be examined, and that its freezing point be multiplied by the total 24 hours quantity. This figure he calls the "Valenz" and when compared for several days in succession, believes it to be of diagnostic importance. The "Valenz" rises as the freezing point of the blood returns to normal.

As to the value of cryoscopy of the urine in determining the physiological capability of the kidneys it is generally regarded both theoretically and practically as useless. As to *cryoscopy of the blood*, however, opinions are not uniform. It is generally believed, that a study of the freezing point of this material, does to a certain extent, in conjunction with other methods of study, afford some index to the presence of certain substances which alter the molecular contents of the blood. That renal disease is the only cause for such alterations is disputed. The questions as to whether such variations may be produced by diseases of the blood, the liver and other internal organs by carcinoma, syphilis, tuberculosis, etc., etc., and by insufficiency of the other and compensatory metabolic and eliminative structures is unsettled. Israel and Englemann claim that in advanced carcinoma, the freezing point is lowered, due to impregnation with albuminoid toxic substances. Englemann from thirteen cases, denies such effect as a rule, though in a few cases he found a value of 53 or 54.

Bevan says that anaemia varies the freezing point in the same way as does renal disease. This implies that the relation between these two factors must be determined before cryoscopy alone can be valuable. On the other hand does insufficiency of the eliminative organs as a whole always produce high molecular concentration (lowered freezing point) of the blood? Poly reports three cases of extremely severe uraemia in which the freezing point was normal, and two cases in which molecular concentration persisted high for twenty days, with

no appreciable symptoms of uraemia.

It must be remembered that the renal functions are greatly affected by disease of other structures, and there is a compensatory reciprocating action both in health and disease between the kidneys, skin, bowels and particularly the liver and circulatory apparatus, and that while such action is limited, it is intimate and far reaching in effect. In many instances the skin and bowels have been made to supplant the entire excretory function of the kidneys and vice versa; moreover, the work done by these organs harmoniously i.e. the total renal function, varies widely at different periods, even at different times of the day, and under the influence of diet, drink, sleep, emotion and many other conditions, so that an "*accurate*" test must be made under proper circumstances and with due regard to all such factors. Repeated observations must be made and recorded, and throughout, the compensatory organs must be watched. Finally the two kidneys themselves, present wide variations, both in health and disease, as to functional capacity; activity and physiological rest alternating in the two. It is not certain that intravesical manipulations, particularly ureteral catheterization does not produce alterations in physiological activity. Kapsammer has demonstrated that it causes reflex polyuria. The technique of all these so-called accurate tests, is intricate and subject to many sources of error even in skilled hands. Definite conclusions will often be inaccurate.

The underlying principle of all such technical examinations is in many respects comparable to the estimation of nitrogen and other substances in the urine, and must therefore be subject to the same sources of error in forming conclusions.

It may be that some day, as a result of the various tests of individual and total functional capacity of the kidneys, in combination with routine observations as to quantity and quality of the various substances eliminated in the urine and present in the blood, together and always *in conjunction with a broad judgment* of each individual case, that in many cases a correct estimate as to diagnosis and prognosis may be made.

Surgical Treatment in the presence of renal incapability.—Not every case of apparent, even marked renal insufficiency indicates impending kidney breakown or uraemia, nor on the other hand does normal function in these organs, in every case guarantee against such occurrence. Nor does every operative procedure, even on the urinary apparatus, intensify insufficiency. Positively demonstrable, readily removable causes of impaired renal function, whether located in some remote structure or in the urinary apparatus itself, should be removed. Disease in one kidney often causes suspension of function directly in the organ affected and reflexly in its fellow. The severity of such effect is not necessarily in proportion to the severity of the lesion, nor is it confined to lesions of the kidneys. Calculi, neoplasms, suppurative lesions, stricture and all sources of obstruction to elimination should be removed. Injurious mobility of the kidneys should be corrected. Such lesions when sufficiently severe to seriously impair the renal functions, present absolute indications for operation. A frequent indication for the induction of abortion, is kidney breakdown.

Radical treatment of prostatic hypertrophy is called for, when progressive, not too far advanced, renal degeneration becomes apparent. Nephrotomy and renal decapulation have repeatedly relieved urinary suppression, impending and in some cases actual uraemia and puerperal eclampsia. Nephrectomy is often followed by polyuria. In general it may be said, that in all cases of disease of the genito urinary apparatus in which one kidney is free or nearly so from the cause of renal insufficiency, and in which conservative measures fail to ameliorate or at least check, the progress of the disease, radical treatment is indicated. When the process is rapidly progressive in spite of such treatment operation is demanded and must not be postponed longer than is necessary to prepare the patient to withstand the additional effect of anaesthesia and the shock of operation. Operations of necessity in other parts of the body, even in the presence of marked renal disease, cannot be postponed too long. When operative measures are indicated in patients with renal insufficiency, collateral treatment, before, during and after operation becomes exceedingly important. In all cases the urinary apparatus and its compensatory eliminative structures must receive careful attention. All substances necessitating extra work on the part of the kidneys, must be excluded from the diet, in many cases the diet should be limited to milk. Rest in bed free purgation, a warm room free from draughts, in some cases diaphoresis by drugs and occasionally hot packs or vapor baths are demanded. Cardiac and vascular tonics particularly digitalis, and for its relaxing effect nitro glycerine, are useful. The urinary organs must be thoroughly cleansed, the urine rendered bland, all sources of irritation and obstruction removed, and perfect drainage maintained. It has been many times conclusively demonstrated that thorough drainage is one of the most potent

factors, and often sufficient in itself, to restore impaired function. The beneficial effects of permanent catheterization in all obstructive and suppurative diseases of the urinary tract is well known. By thus insuring continuous evacuation of irritating and toxic substances from the bladder and placing the lower urinary apparatus at rest, inflammation disappears, infection descends instead of ascending, the ureteral orifice and its valve become narrowed down and perform their function; distorted, dilated, atonic, hypetrophied bladder and ureters tend to become restored to functionating tonicity, hydro- and pyonephrosis are relieved, negative pressure in the kidneys becomes re-established, vis a tergo is restored and all the functions of the kidneys are manifestly improved. During operation, all the precautions against suppression of urine must be rigidly enforced. Nitrious oxide anaesthesia when practicable should be employed, extra precautions against shock should be taken, entero- and hypodermoclysis of hot normal salt solution are valuable. As to the nature of the operation advisable in renal insufficiency, if election is possible, the least severe and prolonged one should be chosen, provided it can accomplish the purpose. If both kidneys are the seat of extensive disease, double nephrotomy is preferred to single nephrectomy and nephrotomy. If the disease is unilateral, and nephrectomy is indicated for cure, a primary nephrotomy will often allow the opposite organ to undergo compensatory physiological hypertrophy so that subsequently the diseased organ may be removed with impunity. Primary nephrectomy with the opposite organ already crippled often results fatally, the sudden extra work thrown on the opposite organ resulting in total cessation of function.

Dysmenorrhea.*

By Edward A. Schumann, M. D., Out Patient Surgeon, Gynecean Hospital, Philadelphia, Pa.

In approaching the subject of Dysmenorrhea, the writer is aware that he is entering upon a field which today has yielded less to medical and gynecological endeavor than any disorder affecting the female generative organs, with the single exception of the malignant neoplasms.

In offering this brief paper for your consideration, there has been no attempt to produce any original work, but simply to correlate the facts as they present themselves at this time and to outline the modern teaching of the etiology and pathology of the symptom—for symptom it is, and to offer some suggestions for the relief of that terror to so many women, painful menstruation.

The disorders of the menstrual function may very properly be divided into those originating in the uterus itself; those caused by some definite pathological lesion in pelvic organs; those secondary to some constitutional disease, and those which so far as our observation goes are purely neurotic or idiopathic in character.

We may begin then with four gross varieties of menstrual disorder, giving rise to pain:

Uterine.
Para-uterine or Pelvic.
Secondary or Reflex.
Idiopathic or Neurotic.

These may again be divided and subdivided according to the etiology of each special variety.

By far the greater number of cases belong to the first and the last group—the second and third divisions containing but a relatively small proportion of the cases.

Uterine Dysmenorrhea may be subdivided according to its etiology into several varieties: First, that form caused by malposition, or malformation of the uterus—the various flexions and versions to which that organ is so subject. Second, that form due to inflammation of the endometrium. Third, that variety caused by the pressure of neoplasms in the uterine cavity or parenchyma.

The second group Parauterine or Pelvic Dysmenorrhea includes that class of cases where the symptom is due to various inflammatory diseases of the pelvic organs, salpingitis, ovaritis, pelvic cellulitis and so on. Together with these must be considered the disorder due to prolapse of the ovaries, with the consequent passive congestion and menstrual pain.

The third group includes the secondary or reflex Dysmenorrheas, the various anemias, the rheumatic diathesis, the infectious fevers, tuberculosis (not pelvic) and so on, often causing violent and intractable menstrual pain.

The last group includes those cases to which no pathological cause can be assigned and which baffle every attempt at a proper understanding of their cause. These are the cases in which an apparently perfectly healthy woman, with no pelvic disorder, no anemia, no tendency to neuralgia may suffer agonizing pain during every menstrual period without relief from any treatment save the use of powerful analgesics. Though every effort is now being made toward the proper understanding of these cases, not much hopeful result has as yet been obtained.

The symptoms, all subjective, of the various forms of Dysmenorrhoea are usually characteristic. Of the uterine Dysmenorr-

*Read before the Potter county Medical Society.

hoea, let us take anteflexion of the uterus—here the pain is usually especially characteristic. Violent and acute pain in the center of the lower abdomen, extending down the thighs, occurs for several hours before the bleeding begins. In the later years of the disease the pain extends to the whole of the pelvis and back. The pain is caused in all probability by the accumulation of blood behind the obstruction in the cervical canal. When the blood begins to escape freely, the pain is relieved and may be absent during the remainder of the menstrual period.

Nausea and vomiting may be present during the height of the pain. The menstrual epoch may be followed by several days of great depression and weakness.

The Dysmenorrhoea of retroversion is of an entirely different nature. Here, the cervical canal is usually patulous, there being no obstruction to the menstrual flow. The uterus, however, is in a state of passive congestion, the ovaries have been dragged down into the Cul de sac of Douglas, and the entire symptomatology is that of congestion and of pressure upon sensitive nerve groups, the retroverted uterus lying heavily against the sacral plexus, with the resulting constant dull sacral backache.

This backache, the reflex headache, the dull heavy pain in the ovarian region radiating down the thighs, together with a free and prolonged flow, complete the picture of retroversion. All the symptoms of retroversion are aggravated during the catamenia.

The presence of neoplasms in the uterus may give rise to Dysmenorrhoea in three different ways. First, if the tumor be submucous, or interstitial, there may be efforts on the part of the uterus to expel it. This gives rise to cramp-like pains usually aggravated at the menstrual period. Again the weight of the tumor may drag upon the uterus, causing a flexion or version with its attendant symptoms. Or by growth and filling the pelvis, the tumor may cause pressure symptoms and thus give rise to a Dysmenorrhoea.

When inflammatory lesions are present in the adenexa, there occurs the Dysmenorrhoea, which has been classified under the second group as Parauterine or pelvic. The menstrual pain in this form of disease is characteristic. The normal congestion and swelling occurring in the inflamed and tender tubes, often cause unbearable agony. The pain begins several days, sometimes a week before the bleeding appears. It starts in one or both ovarian regions and thence radiates through the pelvis, and down the thighs. It usually lasts throughout the period. The third and fourth group of Dysmenorrhoea give rise to pain of infinite variety of character. Like pains of nervous origin elsewhere they vary greatly with each individual case. Usually these are short stabbing pains in one or both ovarian regions, sacral backache and a severe sharp headache usually situated at the vertex. There is also present great hyperesthesia, nervousness and marked depression. These symptoms may also be applied to the secondary or reflex Dysmenorrhoea.

The diagnosis of the cause of Dysmenorrhoea is based largely upon the gynecological examination—thus an anteflexed or retroverted uterus, a pelvic tumor or adherent and enlarged Fallopian tubes may readily be determined to be the causal factor. Should there be no pelvic lesions or no evidence of anemia or other constitutional disease, one is justified in considering the Dysmenorrhoea as idiopathic or neurotic in type and in treating it as such.

The treatment of Dysmenorrhea demands first, that the condition be considered as purely symptomatic. The underlying cause is always to be determined and if possible corrected. To give powerful anodynes in a purely empirical manner without regard to the etiology of the disorder is a practice to be most heartily condemned.

The treatment of that most frequent cause of menstrual pain, pathological anteflexion of the uterus, has after countless experiments and the trial of many radically different procedures, medical as well as surgical, been reduced practically to the performance of an instrumental dilatation of the cervical canal, with or without the introduction of a stem pessary.

In the writer's experience the stem pessary has proven itself of great value, and is unhesitatingly recommended, provided its application and subsequent retention can be carried out under strictly aseptic conditions.

This operation of dilation has fallen into some discredit, owing chiefly to the fact that it has been done without allowing sufficient time to completely paralyze the contractile muscle of the cervix uteri.

The details of the operation are as follows: The vagina having previously been sterilized, the patient is etherized and placed in the dorsal position, with the legs and knees well flexed. The vagina is thoroughly douched with a 1 to 4000 Bichloride solution, a Sims speculum introduced and the anterior lip of the cervix firmly grasped with a double tenaculum forceps. The small sized Goodell dilator is now introduced without force. By careful manipulation the instrument can always be introduced into the cervical canal without any effort. The cervical muscle is then stretched

to the limit of the small dilator when this is withdrawn and the large sized instrument introduced. The cervix is now slowly dilated to one-half inch, or in many cases one inch, and the dilator maintained for at least fifteen minutes. During the time the instrument may be closed for a few moments, two or three times, in order that the cervical blood supply be not interfered with. The dilation having been accomplished, a curettment should be performed if indicated by any evidence of endometritis, the uterine cavity flushed out with 1-4000 Bichloride solution, and the stem pessary or Wylie drain introduced. A light pack of gauze is then placed in the vagina and allowed to remain there for 24 hours. The subsequent treatment consists in the use of a Boracic acid douche (15 gr. to oz. 1) daily for one week. At the end of ten days, the stem pessary should be removed and the patient permitted to get up.

There may be considerable expulsive pain in the uterus during the first days of the operation. In severe cases indeed small doses of morphia are necessary to control the pain. Should the treatment be carefully followed, one can depend upon curing entirely a large proportion of cases. In a small number of patients the operation may have to be repeated. Owing to the traumatism there may be little or no relief at the menstrual period immediately following the operation, but in the succeeding periods the relief is usually complete.

In cases of retroversion of the uterus, the introduction of a pessary will sometimes cure the disorder, but should the use of the pessary be contraindicated by adhesions, laceration of the perineum, or pelvic inflammation, tamponade must be resorted to, or failing this a formal operation for the cure of the retroversion.

In the presence of pelvic inflammation or pelvic tumor, radical procedures are usually necessary before any relief is obtained, though some alleviation of the symptoms may be obtained by the use of tampons, saturated with a 25% solution of Ichthyol in Glycerine and changed daily during the week preceding the menstrual period.

The medical treatment of Dysmenorrhea, though not offering as much encouragement as surgical measures, is absolutely necessary in those cases in which the symptom is secondary to some constitutional disturbance, or those intractable cases of neurotic or reflex origin.

When the Dysmenorrhea results from congestion and expulsive efforts on the part of the uterus, a suppositary of ½ grain Extract of Belladonna introduced in the rectum, repeated if necessary, is often of great value. Tr. of Belladonna internally in doses of 3 to 5 minims is of value in relaxing the spasm of the cervix and of the uterine fundus.

When the Dysmenorrhea is neurotic or reflex in origin the use of the various coal tar products is often successful. Acetanilid, or phenacetine frequently work wonders in these cases. In ovarian reflex Dysmenorrhea Cimicifuga in doses of 10 to 30 minims of the Fluid Extract or 1 to 2 drachms of the Tincture combined with Belladonna as described above is said to be of great efficiency.

Lastly it should be steadily borne in mind that constitutional diseases must be cured to relieve the patient from pain at the catemenia. The anaemia, the constipation, the tendency to rheumatism must be corrected, after which the special symptoms can be hopefully attacked.

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Some Observations Relative to Analysis of Urine and Kidney Lesions.

By R. R. Kime, M. D., Atlanta, Ga., Gynecologist to Tabernacle Infirmary; Ex-President Tri-State Medical Society Georgia, Alabama and Tennessee; Ex-President Georgia State Sociological Society; Ex-President Atlanta Socy Med.

As a foundation for the remarks and conclusions in this paper I present the following report on analysis of urine made by myself or assistants in the last three years.

	1903	1904	1905	
No albumen nor casts present	266	257	367	
Albumen no casts	9	7	9	
Albumen due to pus or blood	13	12	6	
Albumen without casts	10	14	8	
Casts without albumen	62	140	264	
Total examinations made	360	424	654	1438
Casts Present. Hyaline	9	49	19	
Casts Present. Granular	20	23	108	
Casts Present. Gran. & Hy.	40	49	48	
Casts Present. Epithelial	3	19	9	
Note relative increase and relative proportion of specimens containing casts.	1-6	1-3	2-5	

In classification a trace of albumen was not counted unless there was sufficient albumen present to be easily recognized by the H N O 3 ring test. H N O 3 or acetic ac. and heat it was excluded as not of sufficient merit to indicate special disturbance of kidney, quantitative tests were not made. Roughly estimating in all cases containing casts 1-4 or 1-5 would contain a trace of albumen.

The majority of cases of movable kidney contain hyaline or hyaline and granular casts at times, but not always constant.

As to the value of casts in diagnosis of nephritis there is an unsettled condition at present—in the past their presence was taken as conclusive evidence.

Further investigations will be necessary to establish their exact status in the diag-

nosis of kidney lesions. The presence of casts certainly indicates a disturbance of function in the kidneys as they are not present in normal urine, and a continued impairment of function certainly tends to produce organic changes.

We need not expect to find pathological changes in the kidneys every time casts are found in the urine no more than we would expect to find organic changes in the stomach every time there is vomiting or indigestion. The vomiting or indigestion is an index that something has gone wrong with the stomach, so the presence of casts indicate that the kidneys are disturbed. It may be an over-taxing, irritation, congestion or inflammation.

If the cause be transient or be removed then the recovery would be in proportion to the damage done, and if simply a perverted function then no pathological lesion would remain. The main function of the kidneys is to eliminate poisons from the body, the results of metabolism, oxidation and tissue change to which is often added toxines absorbed from the alimentary canal.

The diet, digestion and assimilation are important factors in the production of kidney disturbance and lesion as well as pregnancy, the exanthematous fevers, septic infections, typhoid fever, &c.

In cases of indigestion and fermentation in alimentary canal with constipation long continued produce irritation of kidneys and may ultimately result in structural changes. Diet rich in proteids, especially that from meats in excess of the demands of the body, tend to develop disturbance of kidney function. We are told the end results of proteids are crystalline and have to be eliminated by the kidneys while the carbohydrates result in CO_2 and H_2O and eliminated principally by skin and lungs. The albumenoids from pork and beef especially are said to contain deleterious substances that have to be eliminated by the kidneys. Other deleterious substances are added when digestion and assimilation are impaired and oxidation is incomplete.

Drs. Billings, Anders and others state (A. M. A. Jour., Nov. 4, 1905) that the experiments made by Voit, Chittenden, Folin, Atwater and others prove conclusively that the amount of food ingested (especially proteids) are far in excess of the needs of the average person. Voit places the proteids for a man of 150 lbs. at 118 grms, Atwater at 152 grms, and Haig at 100 grms.

Sedentary life requires less active work, more proteids.

Haig's rule is to multiply the body weight by 3, equals grains urea, and that by 3 for sedentary, or 3.5 for active life gives number of grains of albumenoids required. Proteids in excess of the body needs adds to the work and irritation of the kidneys, especially so when oxidation is incomplete.

Haig condemns the use of meats, coffee, tea and even eggs because they tend to produce accumulation of uric acid and the xanthines.

My rule is in all cases of kidney lesion to exclude all pork and beef, allow very little coffee, no tea, no stimulants, no coca cola, and nothing fried in grease. To live principally on milk, eggs, well cooked cereals, fruits, Irish potatoes, light bread, corn bread, and a reasonable amount of water.

With this line of diet, proper hygienic instructions and such medication as needed to improve the digestion, regulate the bowels and favor elimination most all cases improve, and urine becomes normal.

Irritating diuretics should be avoided; mild alkaline diuretics are useful at times, also Iron in the form of Basham's Mixture or Blaads Iron. An exclusive milk diet is not essential except in rare cases.

Too much fluids will over work the kidneys and increase tax on the heart.

The amount of salt taken is an important factor in increasing the oedema and disturbing the kidneys. The salt in the diet should be materially lessened and lithia water with much salt avoided.

In our experience there seems to be a decided increase of kidney disturbance, else it is due to more careful search and urinary analysis. For the relative increase see table.

Lately I notice a German writer makes the statement that if normal urine is allowed to stand until a nebula or sediment is formed which if withdrawn and centrifugated casts hyaline or granular will be found in a large per cent. of examinations. I have not as yet tested the matter, but can not understand how casts can form in a urine where they did not previously exist. I am inclined to believe it is due to bringing what few casts that exist into a smaller compass and thus more easily found.

If there is an increase in kidney lesions there must be a cause, or more probable a combination of causes. The high nervous tension of the strenous life, immense amount of meats consumed and foods fried in grease, the excessive use of stimulants, coca cola and iced tea all tend to produce indigestion and accumulation of toxines in the body, of which the kidneys have to bear the principal burden in the process of elimination.

This continued irritation and over working of the kidneys in eliminating the toxines absorbed from the alimentary canal, the irritating substances ingested in foods and drinks, with the excess of proteids con-

sumed, deficient oxidation and impaired metabolism certainly tend to produce disease of the kidneys.

If these processes continue it is only a question of time until kidney lesions will be as common as tuberculosis of the lungs. I am inc ined to believe kidney lesions, as complications of other diseases, are far more common than usually recognized. The physician who depends upon a chemical test of the urine without the use of the microscope and relies on the presence or absence of albumen as a guide to disease of the kidney is to a great extent wandering in the dark and will often be deceived. Casts are frequently found in urine without albumen. See table.

Within the last six months I have had three or four cases of typhoid fever with marked kidney disturbance in which there was no albumen, or barely a trace.

The microscope demonstrated the presence of hyaline and granular casts, small round epithelium, few red blood corpuscles and leucocytes, which coupled with the symptoms certainly gave evidence of sufficient kidney disturbance as to be worthy of consideration in the proper treatment of the cases.

There is another class in which I believe the condition of the kidney is overlooked, that is in the excessive persistent vomiting in the early months of pregnancy.

In these cases the careful repeated microscopical examination of the urine will give us a key to the treatment of the case. Unless the kidney lesion becomes severe albumen in an appreciable amount is rarely present.

Many of these cases can be successfully treated and carried to full term of pregnancy by handling them as you would a case of acute nephritis. Rest in bed, restricted diet cutting out all irritating proteids, improving digestion, lessening absorption of toxines from the alimentary canal and the careful use of mild, unirritating diuretics.

The use of the microscope will be a guide as to diet, course of the disease and treatment.

Within the last year I have kept two such patients in bed about three months each.

One has been delivered of a fine baby (the first) and is in good health, the other is in the eighth month of pregnancy, up, in good condition and no appreciable kidney lesion so far as can be found.

In every case of vomiting of pregnancy I would urge the repeated microscopical examination of the urine and if kidney disturbance be found the treatment should be directed accordingly.

I have not referred to the *quantitative* tests for urea because there are so many factors of uncertainty in its correct estimation that it is not of practical value to the general practitioner. The measuring of the amount of urine in 24 hours, and estimating by calculation based upon sp. gr. the amount of solids eliminated can be approximated sufficiently close to determine the functional capacity of the kidneys.

Multiply the last two figures of the specific gravity by 2.33 the coeficient of Haser. This gives approximately the number of grammes of solids in 1000 c. c. of urine from which the total amount in 24 hours can be easily ascertained.

We have also the uncertainty as to the indications of the presence or absence of small amounts of albumen.

It may be present as result of a change in posture on rising of mornings, in active exercise of athletes, those playing wind instruments, and as a result of indigestion without appreciable structural lesion of kidneys.

On account of the variableness of its presence and uncertainty of its indications I do not rely on it as a diagnostic measure of importance, except when albumen is present in larger amounts, then I recognize the gravity of its presence. It seems that we are just now in a transition period in the diagnosis of kidney lesions. Formerly the presence of albumen confirmed kidney lesion, later the presence of casts, now we are uncertain and the investigations of the future must settle the significance of their presence.

As to results of decapsulation for nephritis the question has not been fully settled.

If the cause be constitutional or chronic in character the results are unsatisfactory—a temporary relief is all that could be hoped for—as the kidney lesion is only a local manifestation of a general atheromatous condition of the vascular system.

In kidney lesions the result of acute diseases and the cause has been removed then decapsulation will give the kidney a chance to regain its normal condition. In cases of movable kidney where the circulation is interfered with the occasional presence of casts and nervous manifestations decapsulation is indicated.

I have operated upon several such cases with good results.

In acute suppression of urine where other measures fail to re-establish the secretion of urine decapsulation is indicated.

Where the kidney lesion is secondary to a general arterio-sclerosis I do not see how decapsulation can be of material permanent benefit.

Enuresis in Children.

Lewis (The British Journal of Children's Diseases) says that the variety of causes to which this condition has been attributed and the very diverse treatments which have been recommended for its cure suggest that its pathology has not been accurately studied. The subjects of this complaint are most unhealthy in aspect. The treatment which has for some years been successfully carried out by the writer was suggested by the consideration of a similar condition which occurs in infants fed on starchy foods. Such children always pass a larger amount of urine than normal. When their starchy food is cut off this symptom disappears. It is the same with victims of enuresis. In most cases a rigid anti-diabetic diet removes the symptom in a few days. The cause, however, due to a general depression of health produced by an excessive starchy diet, requires general tonic treatment at the same time. During the cure, starchy food may usually be allowed for breakfast without "accidents" occurring at night. Without any other treatment, hospital cases are relieved often at once and finally cured by being taken as in-patients and fed on the ordinary hospital diet. In private cases even small quantities of bread or cake given at dinner or tea early in the treatment cause the bed-wettings to recur. In about three to four weeks, sometimes sooner, if the tonic treatment is pushed as well, a normal diet may be given without enuresis happening.

The Diagnosis of Perforated Duodenal Ulcer.

Clogg (British Medical Journal) states that perforated duodenal ulcer has only on rare occasions been diagnosed. Symptoms of perforative peritonitis occurring in a person in previous good health, particularly a male subject between thirty and fifty years of age, the early symptoms being marked in the upper region of the abdomen, should excite a suspicion of duodenal perforation.

Should these symptoms occur in a person who has previously complained of gastric disturbances, however vague it may be, the suspicion is greater. In the very acute perforating duodenal ulcers the differential diagnosis from gastric perforation will be impossible. Gastric ulcers generally perforate in young anemic women; duodenal ulcers in men between thirty and fifty. But this is by no means constant.

Symptoms of acute perforative peritonitis of epigastric origin and spreading down to the right iliac fossa, simulating an acute appendicitis, are frequently seen in duodenal perforation, but very infrequently in gastirc perforation. In these cases it can generally be noticed that the early signs are referred to the upper abdomen; the iliac fossa is only secondarily involved. Rigidity at first is in the hypochondriac region, and only later in the iliac region. The initial shock is more intense generally in acute perforative appendicitis, and septic poisoning is seen earlier in the history of the case.

An acute appendicitis may travel from the iliac fossa to the right hypochondriac region, and thus simulate a duodenal perforation. The earliest signs here are in the right iliac region and only secondarily located in the hypochondrium. The similarity of duodenal perforation to acute appendicitis must be borne in mind, and by attention to the onset, the early site of pain, the area of rigidity, and the initial higher fever in appendicitis, a correct diagnosis will generally be arrived at.

The occurrence or not of hematemesis or melena should be inquired into. A previous history of melena only suggests a duodenal perforation.

It is easier to exclude other causes of perforative peritonitis than a duodenal ulcer, and by exclusion a perforated duodenal ulcer ought to be more frequently diagnosed.

Middle Ear Supperation.

Milligan (British Medical Journal) notes the various modes of treatment which conduce to the rapid cure of acute septic otitis media, and prevent the onset of chronic disease as follows: Early and free incision of the swollen and bulging membrana tympani. Maintenance of free drainage through the incised membrane. Avoidance of inflation during the acute phases of inflammation of the mucosa lining the middle ear-cleft. Early removal of nasal and nasopharyngeal pathological entities. Early provision of drainage from the postero-external end of the middle ear-cleft in those cases where drainage through the membrana tympani has proved insufficient. Waggart states that with serous effusion medical treatment as a rule suffices. With mucopurulent catarrh, it is especially necessary to remove some causative factor in the nose or nasopharynx. In acute suppuration, besides the removal of the remote cause, pressure must be removed and the poison diluted without delay.

Bronchiline.

There have been but few specifics discovered for any disease that flesh is heir to. No one in this day expects such a thing. It is equally true that a few standard remedies furnish nearly all that we have that can be safely used. Bronchiline is a compound elegantly put up, carefully harmonized and one of the few tried and well known remedies for all ailments of the bronchial tract or of the lungs. The formula is furnished with each bottle. Full particulars upon application. Peter-Neat-Richardson Co., Louisville, Ky.

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THE TRANSACTIONS OF THE MEDICAL SOCIETY OF NORTH CAROLINA 1905.

This handsome volume comes to us this year with more than 650 pages. The discussions are unusually well reported, covering fully a hundred pages of the book. Over fifty papers are published. Many of them are of a very high order of merit. The book is well indexed and shows the expenditure of much industry on the part of the secretary. It is the handsomest volume of transactions of any State Society except New York. It shows that we have a membership of the component county societies of 1200,—only five counties are now unorganized. Dr. J. Howell Way, our secretary of the Association, has again shown that he has excellent taste and ability to arrange and edit in an attractive way the annual volumes of the transactions.

OBJECTIONABLE ADVERRTISEMENTS AND THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

The following letter was received the 17th of January, 1906:

"Dr. E. C. Register, Charlotte, N. C.

Dear Doctor:—

Your favor of the 11th inst. received, enclosing proof which you stated you did not care to publish in the Charlotte Medical Journal, unless the wording was somewhat changed. I do not object to the change, but in defense of the advertisement I will state that the same has been carried by the Journal of the American Medical Association for over two years."

We approve in part of the efforts that the American Medical Association is making to improve medical journal advertisements. We feel sure that there are proprietary remedies extensively advertised that are worthless and ought not to be mentioned in a medical magazine. They are not, when we come to think of it, as numerous as many medical editors want us to believe. Many of them are valuable, really the most of them are valuable and will continue to be prescribed by the thoughtful practitioner. When the Association commenced to deal with proprietary preparations, when it proposed to place each of them in a class where they belonged, it undertook a difficult work and one that ought to be in the hands, and I think is in the hands, of painstaking, deliberate, intelligent experts; men who want to be just to everyone concerned. They ought to go slow—they cannot afford to make many mistakes. If they show evidences that they are not capable of conducting this work on just and broad principles, they will make a failure and do more harm than they will do good. It is certain that they will have some influence on the character of the advertisements in the Journal of the American Medical Association. That Journal ought to be the most ethical and the most scientific of all the journals in this country. As it is, it cannot justly claim this honor. It often carries advertisements that many other journals refuse, and publishes communications that show evidences of commercialism in character.

This is not the first time that the editor of this journal has had proof of it. A year ago the Journal of the American Medical Association was carrying advertisements and pretended to know all about the formulæ of the medicines in these advertisements, that they are now condemning in the strongest terms. If the preparations are worthless now they were worthless a year ago. The editor pretended to know that they were good a year ago—he was wrong then or wrong now, it is hard to tell which, I don't think he knows himself. He seems to be in a state of confusion—it is hard to keep up with him. Possibly in a year from now the medicines that he condemns now will be advertised in the Journal of the American Medical Association. His policy is constantly fluctuating His methods are typically American—his natural tendencies are to carry things to extremes.

It all demonstrates that our old idea is the only practical one, as we now see it, that the Journal of the American Medical Association should not carry any advertisements at all. It will have to adopt this policy if it will ever have the influence with the medical profession of this country that it ought to have. A great deal of the literature that it publishes has shown, and will continue to show, evidences that it was written for commercial reasons. We admit that this class of psuedo medical literature is liable to get into many journals, but it ought not to get into the Journal of the American Medical Association. The medical profession of the country demands and ought to demand more of it than they do of any other journal. When it becomes perfect in its behavior and in its ethics it will have a good influence over every medical publication, and not before. The argument that the Journal cannot run without advertisements ought not to appeal to the thoughtful man. If the dues that are now paid to the Association are not sufficient to give us the transactions in a journal form, they can very easily be made to do so. This plan is certainly more practical than the plan they are now pursuing.

ARRESTED MENTAL DEVELOPMENT.

Arrested mental development is a misfortune to both the parent and child, calling for the physician to put forth all his efforts to discover the cause and, if possible, remedy the condition. It is probable that notwithstanding the statistics a very large proportion of our feeble minded children are not heirs to the sins of omission and commission of their parents, but that the etiologic factor of their defective mentality is of post natal origin. Acute diseases in the first three years of life are often the cause of lesions which permanently effect both the mental and physical development of the child. It has been a matter of common observation that after a severe attack of the acute diseases of childhood such as measles, scarlet fever, whooping cough, etc., there has occurred a gradual decrease in mental growth, the child may not be stupid or apathetic but his mentality remains backward for his years, described as weakness of character or childishness, he having the normal mentality of a child much younger in years; puberty is delayed, it is true as he grows older his mind also grows, but he never arrives at mental maturity. In other cases the child deteriorates, becoming imbecile or even idiotic, in which case it is more than probable that during the acute disease from which he has suffered his thyroid has become infected resulting in a cirrhotic condition of the gland and consequent insufficiency, at puberty when extra demands are thrown upon the thyroid the symptoms become accentuated, a mytodematous condition commencing which unless treated will proceed to a cretinic condition from which there is little or no hope of recovery. Another cause of arrested mentality is found in defects of assimilation and metabolism, cases occur where from some acute disease the succus stomachi fails to contain either hydrochloric acid or the ferments; the exciting factor to the intestinal secretions not being present the digestive process is deranged and both physical and mental development are arrested for lack of nutrition. These cases usually have an uncontrollable diarrhoea with poor assimilation of fat. Still another cause is to be found in circulatory defects, the cardiac energy may have been affected and on taking the erect position there is not sufficient force to drive the blood to the brain. These children are usually well developed in the lower trunk and limbs but the head and expression gives the observer the impression of feeble development. The quantity of blood required by every organ can be divided into three portions, the first required for food, the second for functionation, and the third for growth, while the child remains recumbent, the circulation is about equal all over the body but on his taking the erect position the heart is unable to force the blood to the vertex and though it may send enough for nutrition yet not enough for perfect functionation and growth; in anangioplasia where the arteries are reduced in calibre this condition exists. The acute diseases may have affected the special senses, the child does not commence to talk or walk till long after the usual age, his limbs may be well nourished but he lacks the nervous force from the cerebral centres, when he does commence to talk there are defects of speech which may be due to structural irregularities in the peripheral organs of speech, the tongue, palate, lips, teeth, nostrils and pharynx or in their nerve supply. The intellectual centres of the brain are in close connection with the central or cerebral speech mechanism, language and thought inseparable; to think is to speak low, to speak is to think aloud, as it is impossible to learn to speak without calling into requisition the sense of hearing the child cannot talk nor think if its hearing is defective which is often due to infection of the auditory apparatus. Those children whose hearing is defective may appear bright in certain lines, they may be able to make their every want understood by pantomine but their mental development is permanently retarded unless the auditory defects can be remedied. Many children can be found in every asylum whose enfeebled mentality is due to ear disease the result of post natal infection. Defective sight owing to the strain upon the eyes, often arrests the mental development of the child and in a few cases produces epilepsy which in its turn increases the mental hebetitude. There is every probability that insufficiency of the suprarenal glands is also a cause of arrested development and absence of the testicular secretion has also a pathologic effect upon both body and mind. Intestinal parasites are often a cause of stunted growth owing probably to the fact that they produce an antibody which destroys enterokinase, the ferment whose function it is to convert the inactive trypsinogen of the pancreatic secretion into active trypsin thus striking at the very foundation of intestinal protein digestion. Much can be done for those whose development has been retarded by antenatal conditions produced by disease of the mother during pregnancy. As the foetal liver is the organ which received the maternal toxines it is the organ which requires the post natal attention of the physician. The right side of the heart during foetal life is the principal factor in the circulation and antenatal valvular lesions are almost invariable in the tricuspid valve.

In every case attention to the digestive tract is of the first importance, as without nutrition no matter whatever lesions may exist, development either mental or physical is impossible.

PNEUMONIA.

Hopes at one time ran high that an antitoxin would be found for pneumonia as effective as that for diphtheria but investigation has shown that there are a number of diplococci differing in infectiousness and virulence which produce a pneumonic condition, rendering the possibility of a specific antitoxin very remote; as the average case is usually a multiple infection, other bacteria have to be reckoned with as they are accountable for most of the serious complications.

The treatment of this disease is too often only confined to the lungs and heart, ignoring the fact that pneumonia is a general infection, the diplococci being found in the blood in nearly every case. Fifty years ago the patient was wrapped in a thick cotton jacket and dosed with large quantities of hot spirits, which promoted diaphoresis, stimulated the heart, dilated the peripheral vessels and as it is largely eliminated by the lungs it probably had an inhibiting effect upon the growth of the cocci. We doubt whether the mortality statistics are any better today than they were under the old treatment. Today quaiacol and creosote are used for their germicidal and temperature reducing qualities and though by no means a specific they are of undoubted benefit except in cases with kidney insufficiency. The stomach should be carefully watched to prevent distention which causes pressure on the already weakened heart, an injection of one ounce of glycerine into the rectum often rapidly removes the gas. Water should be given freely containing the inorganic salts of the blood in their normal proportions either by mouth or high enema to assist in the solution and elimination of the toxins by the kidneys. In pneumonia the urine is nearly always dark colored, containing but traces of chlorids and large quantities of uroerythin.

Of the greatest importance are the dangers that threaten the heart, the medullary centre is affected by the toxaemia, the heart muscle by the insular areas of infiltration and degeneration about the smaller vessels which occur in all infectious diseases, as well as the results of the hyperpyrexia; the obstruction of the pulmonary circulation throws increased pressure on the right heart, though dilatation is not always present, the danger being greatly increased by the presence of emphysema or old mitral insufficiency. The left ventricle suffers from textural changes increased by arteriosclerosis and renal disease; if the sp. gr. of the urine remains low the prognosis is grave. The maximum blood pressure is low in proportion to the mean showing a weakened condition of the heart muscle and contraction of the arterioles indicating the use of adrenalin, caffein, alcohol, camphor, or digitalis with nitroglycerine or nitrohydrochloric acid to dilate the arterioles, the latter having an especial good effect in stimulating the liver. The vasomotor paralysis of the stomach and intestines as shown by distention is difficult to relieve in some cases, purgatives being contradicted as a rule. The anaemia of bulk which is usually present should be relieved by high enemas of salt solution made as mentioned above. Cold baths should never be given, sponging and ice to the chest and head are usually employed, but as 104 degrees is the normal rise of temperature in pneumonia it is not of such importance except for comfort. Sleep is of great importance and should be obtained by some means, under the old system the patient was under the influence of alcohol all the time and slept 18 or 20 hours out of the 24. Oxygen is of little value except perhaps to tide over an attack of dyspnea and cyonosis. The diet should be easy of digestion and ample as the loss of nitrogen is very great, water should be given in large quantities in the form mentioned above, alcohol should be given in full doses, but drugs should be used sparingly reserving them for any crisis that may arise. Strychnine so strongly recommended by some should not be given until the other heart stimulants have failed, given to a heart that can still do its work, though feebly, it is like flogging a beaten horse, given when the heart has become exhausted it may tide over a crisis.

THE RONTGEN RAYS IN THE TREATMENT OF LEUCAEMIA.

The X-Rays have been used in the treatment of pseudoleucæmia and leucæmia for a little over two years. Many reports have been made in which cures are claimed, and some reports have also appeared in which the fatal termination of cases previously reported cured was recorded.

In a paper in which they report a case of pseudoleucæmia and one of myeloid leucæmia treated with the X-Rays, Holding and Warren (*New York Medical Journal and Philadelphia Medidal Journal*, November 11, 1905) reviewed the literature up to the end of 1904. They found that twenty-five cases of myeloid leucæmia had been reported, of which eight were symptomatically cured, fifteen were improved and two were unimproved or had died. Eight cases of lymphatic leucæmia had been treated of which none was cured, three

were improved and five were unimproved or had died. Twenty-two cases of pseudo-leucæmia had been treated of which six were symptomatically cured, thirteen were improved and three were unimproved or had resulted fatally. The case of pseudo-leucæmia reported in this communication was symptomatically cured twice; in each instance there was a relapse, and during the second relapse, X Rays not being available, the patient died. The patient with myeloid leucæmia improved under treatment but subsequently relapsed.

It is too early to say how many of the patients who have been reported as having been relieved of their symptoms by this method of treatment have relapsed; but in addition to the two just referred to, the patient reported by Brown, in March, 1904, suffered a relapse and died and the autopsy findings were reported by Brown and Jack in the *Journal of the American Medical Association*, March 25, 1905. One of the two cases reported by Musser and Edsall (*University of Pennsylvania Medical Bulletin*, September, 1905) was a patient who had previously been symptomatically cured with X-Rays and who died in his relapse in spite of X-Ray treatment. Edsall has shown conclusively that this form of energy acts by a stimulation and acceleration of autolysis; as indicated by the marked increase in the excretion of nitrogen, uric acid, purin bases, and phosphates. In the *New York Medical Journal and Philadelphia Medical Journal*, September 2, 1905, Swan said, after a hasty review of the subject: "In this disease (leucæmia) we are justified in using the Rontgen rays as a therapeutic measure; but we cannot promise more than temporary relief to the patient."

THE LIMITATIONS OF DIAGNOSIS BY ANALYSIS OF THE STOMACH CONTENTS.

About 15 years ago the work of Ewald, Boaz, and others brought into prominence the diagnosis of pathologic gastric conditions by the exhibition of a test meal and the quantitative analysis of the gastric contents after a given period of time. Theoretically this method should be scientifically exact, but clinical experience has shown that it is open to many fallacies. In the first place the nature of the food given has a decided effect upon the stomach secretions of different individuals. Pawlow has shown that the psychic secretion is much more abundant when the meal appeals to the palate, in those patients who do not like rare meat, soft boiled eggs, or boiled rice, the psychic secretion will not be as large as in those who are not so dainty, further the large amount of food in the ordinary test breakfast is as much or more than the average healthy person is in the habit of eating as nearly all patients suffer from want of appetite in the morning it is doubly disagreeable consequently affecting the stomach secretion. If only the Ewald breakfast is given, a cup of weak tea without milk or sugar and a slice of dry bread, the stomach rebels against such an apology for a meal and no squeamish appetite will relish dry bread and weak tea, the German brodchen is much more appetising and palatable than the damp doughy substance which is commonly dignified by the name of bread in this country. It is evident that the meal itself will cause errors in diagnosis from individual idiocyncrasies, a source of error which it is impossible to overcome. The effect upon the patients nervous system also has to be taken into consideration The average patient who receives an unpalatable meal at an unusual hour and who is compelled to eat it all, then to wait for a given time with the dread of the unknown impending ordeal of having a long rubber tube passed into the stomach is usually not in that condition of nerve tranquility which is conducive to the best activities of digestion. The effect of shock, anxiety, etc., is usually to reduce the amount of stomach secretion at least taking away the appetite and in susceptible patients produces indigestion. We have had considerable experience in stomach diagnosis in nervous patients and have come to the conclusion from clinical experience that the results obtained from quantitative chemical analysis of gastric juice after a test meal are very unreliable.

Other sources of error occur in the method of analysis. Topfers method with the three indicators, dimethyl amido azo benzol, alizarin, and phenolthalein is simplicity itself, but is open to grave objections on the ground of accuracy, no other method of quantitative analysis has been devised which is simple and rapid enough for general use. The writer has found that the relations of the chlorids to the total nitrogen of the 24 hours urine is a more trustworthy guide to the differentiation of hypo and hyperchlorhydria than the test meal. By carefully estimating the urea by the Doremus method and dividing the amount by two a very close approximation to the total nitrogen may be obtained, the estimation of the chlorids by Vohlhardts method is easy and rapid, if the proportion of chlorids to nitrogen is below 7 to 10 it is very strong evidence that there is a hyperchlorhydria and if the proportion is much above these figures and especially if these chlorids are in excess of nitrogen a fairly certain diagnosis of hypochlorhydria may be made. In our experience this method of diagnosis has given more reliable results clinically than

the more elaborate method of the test meal.

DEATH OF DR. MILLER.

On January 10th, 1906, occurred the death of Dr. J. F. Miller, who for the past eighteen years has been superintendent of the State Hospital for insane at Goldsboro, North Carolina. During this time Dr. Miller has, by careful and diligent work, made this State Hospital for the colored insane one of the foremost in the South. For the past twenty-three years Dr. W. W. Faison has served as first assistant. At the last meeting of the Board of Directors he was unanimously elected to the position of superintendent. The election gives universal satisfaction, for Dr. Faison is recognized by all who know him as a man of decided professional ability. His long and active connection with the Hospital both in the professional care of the patients and the administration of its affairs preeminently fits him for the position of superintendent Under his skilled and competent management the patients of the institution and the interests of the State will alike be well taken care of. The superintendent is elected for a term of six years and as the late Dr. Miller has served only nine days of his fourth term Dr. Faison's election is practically for six years. The election of an assistant to succeed Dr. Faison was postponed until a subsequent meeting to be held not later than April.

THE MEDICAL SIDE OF LIFE INSURANCE.

To one whose ear is carefully attuned to catch the drift of passing criticism (if such there be) of the foibles, the simple weaknesses and the positive misdeeds of the members of the medical profession, the relative attitude of the physicians connected with life insurance companies as compared with the various other classes of people engaged in the employ of the great insurance corporations is well calculated to both please and to emphasize the now generally recognized fact of the superiority of doctors as a class of human beings. With the months of severe scrutiny and pains-taking investigation to which every department of the New York companies have recently been subjected by the authorities and the lynx-eyed reporters of the great dailies, ever alert for opportunities to scent new instances of corruption and inefficiency in all quasi public services, it is eminently noteworthy that while every other class of men connected with the insurance business, the lawyers, financiers, presidents, directors, agents, special agents, in short all salaried officials, have been shown to be tinctured with the maleverous spirit of corruption, it has remained yet for the first suggestion to be made that the physicians, from the medical directors down to the local examiners, are not exactly correct, honest and proper in all their relations with the companies. We note with much pleasure the editorial utterance of the *Times*.

"Underpaid in the most extravagant company and unappreciated, the medical examiners and directors have performed their work, thoroughly, conscientiously and beyond criticism. Yet putting the listening ear to the trembling air, we hear no chorus of praise to the faithful physicians in their positions of trust. The only words that come along the line are commands from the companies' officers to cut down the medical expense, already down to the bone.

"It would be interesting for the Legislative Committee to call the medical directors of the various companies and ascertain their pay. It would be found so meagre that even in companies with one-hundred-thousand-dollar salaries it would be laughable, were it not pitiful. These medical directors control the life-blood of the companies. Their work is the heart, the body, and the soul of the companies' existence, and yet these men, intelligent, skilled and honest, are frequently forced to take practice to keep up their homes in proportion to the dignity of their positions.

"When it comes to the examiner, the companies scarcely consider him at all. Even the select few who devote their entire time to examining, find it hard picking. For example, the principal examiner of a principal company in a metropolitan city stated recently, 'I sat in a man's office for an hour waiting to examine him for a ten-thousand-dollar policy. He looked healthy and would have passed the inspection of the company as to his business and social standing. But I found a systolic murmur in his heart region, and I believe that that man will scarcely live ten years. I saved my company ten thousand dollars, for which I get the munificent pay of two dollars,' and this company is being criticized for its extravagance of management. Surely it is not in the medical department.

"Some day on that brighter shore we suppose the doctor will come into his reward. But here we see but little of it. The physician is expected to be honest, efficient and omniscient and live on the clear, pure air which surrounds him."

In this connection it may not be amiss to remark that the very general adoption by the county societies over North Carolina of the resolutions adopted at the last session of the State Medical Society in Greensboro urging all to firmly stand for a $5.00 fee for all examinations for regular old line life companies, has created a considerable degree of interest on the part of some of the

companies who have been already endeavoring to secure the support of some of the leading members of the profession to endeavor to secure a rescinding of the resolutions at the next meeting. The action of the Society was advanced, progressive, and correct, and we assume there will be no retracting on its part. Meanwhile, it is manifestly the duty of every self-respecting physician in North Carolina to gently but firmly refuse to examine applicants for regular life policies in old-line companies for a less fee, remembering that the deliberate concerted action being had in this matter in all sections of the State will, in a comparatively short time, adjust the matter with the remaining companies who desire a complete insurance examination with urinalysis for less than $5.00, and all of them will be paying (as most of them are now) the fee desired by the Society.

Review of Southern Medical Literature.

The Virginia Medical Semi-Monthly, December 8th, 1905.

Principles of Surgery Suppuration—Causes—Pathology—Symptoms—Variety—Diagnosis—Prognosis—Treatment—Pus—Composition—Clinical Types, Etc.—By Stuart McGuire, M. D., Richmond, Va.

Report of a Case of Unruptured Tubal Pregnancy of Four Months Development.—Dr. J. Westley Bovee reports the following case: M. C., age 41, family history negative; married in 1885, has six children living and two dead. Three years ago she noticed a growth in the abdomen, the size of which increased slowly until last January. Since then rate of enlargement has been rapid. Has had one child with normal labor since development of tumor. Menstruation began at the age of 16, lasted from 4 to 6 days, was regular and remained so until the birth of the last child, April, 1902. It was irregular from that time until it stopped in December, 1904. A discharge continued from the vagina and she was confined to her bed until she was admitted to the hospital. On admission she was suffering with severe pain and vomiting. Upon examination the lower abdomen was found to be distended by a tumor most marked on the left side and extending upward nearly to the umbilicus.

April 13th, 1905, operation was done which consisted of the removal of the uterus and both appendages through the abdomen.

The uterus was enlarged and contained a few small fibroids. The left tube contained a four months foetus. The appendages were markedly adherent and a vaginal drainage seemed imperative. Complete extirpation was done. The foetus was alive, as evinced by a few convulsive movements after removal. It was located about two inches from the fimbriated end of the tube from which it was separated by a blood clot of dark color. There was no point of rupture in the wall of the tube nor was there any free blood in the peritoneal cavity. As no uterine hemorrhage had occurred we must infer that disturbance of foetal structures was but slight, if any at all had occurred.

Gaillard's Southern Medicine, December, 1905.

The Menopause.—Dr. W. Lowndes Peple says though forty-five years is the average age at which menstruation is completed, instances are on record in which menstruation has ended as early as seventeen and persisted as late as one hundred and four. Climate influences it materially. Obesity seems to bring on early menstruation, probably from defective circulation. Fat women show this tendency in the amenorrhea which is so common to them. Wasting diseases, long continued suppuration and profound anemia bring the function to an early close.

Rapid child bearing in a young woman has the same effect by seeming exhausting the reproductive function. Heredity plays an important role, also destructive diseases of the pelvic tissues. Temperament is also an important factor in its bearing upon the menopause, for the high strung, neurotic woman who has suffered with her menses is far more liable to have a stormy menopause than one who has little difficulty with her periods. Neoplasms of the uterus by increasing its weight and its vascularity and by mechanically preventing normal contraction of body or cervix not only aggravate the normal flow but inaugurate bleeding at irregular times.

Hemorrhage is by far the most important symptom of the menopause, for early recognition of the cause often means the life of the patient. That copious bleeding in the absence of discernible lesion may occur at this time cannot be denied. The fact that physicians know it to be rare does not alter one whit the deep rooted belief in the lay mind that it is not only frequent but perfectly natural. Of all the accompaniments of the menopause the hot flush is the most constant. Though many forms of insanity are encountered during the menopause melancholia is the one oftenest met with and, happily, the prognosis when this is the cause than under most other circumstances. As to care of patients undergoing a morbid menopause few general rules can be laid down, for the treatment must of necessity be more or less symptomatic.

Hemorrhage is a troublesome and, at

times, alarming symptom to deal with, for as stated it may not be dependant upon a recognizable local cause, nor will ordinary methods check it. Absolute rest in bed with hips elevated, hot antiseptic douches and nerve sedatives should be tried, and in one accustomed to these floodings the period should be anticipated. When a fibroid is causing bleeding at this age we should not be too precipitate in advising hysterectomy for many of these cases if patiently and judiciously handled until the menopause is passed will not only bleed no more, but the tumor will undergo shrinkage with the uterus so that the patient is in far greater comfort than for years. Treatment of the nervous system demands everything in the line of therapeutics that will put the whole system right. For the hysterical cases general massage may be used with usually good results. Static electricity has proven in my hands a most useful agent in these cases. When the mind is overthrown these cases must be treated according to the type of insanity they assume, not at home but in the hands of strangers under a new environment. Their recovery is at times remarkable in its rapidity and completeness.

Maryland Medical Journal, December, 1905.

Beri beri as met with in the Philippines.—Dr. H. M. Cohen believes that with the acquisition of the Philippines and our taking over of the Panama canal the study and treatment of tropical diseases must be added to American medicine, and among the number of ailments likely to attract our greatest attention in both of these tropical countries perhaps the one of most interest is beri beri.

Scheube and Baely were the first to accurately define and correctly apprehend its pathology, and they were also the first to fix the disease as being distinctly in the nature of a specific peripheral neuritis similar in many respects to that of diphtheria and alcohol, a view confirmed by the researches of Pekalharing and Winkler and more recently by Mansow. In the epidemic at Cebu may be found examples of beriberi in its worst forms. In many the face and neck present a puffed, swollen appearance and the oedema of the legs and arms varied from a slight enlargement to an extensive bloating. The pain in the knee and legs had somewhat of a therapeutic character, but on pressing the gastrocnenaus or biceps muscle it was often intense. At this stage locomotion usually became difficult. The knee jerk was absent or impaired and there was numbness of the skin. Here very likely the patient took to bed. The swelling perhaps subsided and gave way to atrophy. The patient perhaps went on to recovery from this stage. If not, locomotion became more difficult, paralysis having advanced. Ankle or wrist drop or both intervened. He soon became helpless, unable to stand or sit up. He complained of pain in the chest, palpitation, and showed signs of dyspnea. If persistent vomiting was present it was regarded as meaning that the pneumogastric was involved and therefore a bad sign. There was often difficulty in swallowing, the voice became husky and even whispering.

At this stage more than likely the case assumed suddenly a serious turn. The patient was found propped up in bed struggling for breath. His countenance was expressive of greatest distress—eyes bulging, face purple, the arteries of the neck throbbing violently, and between gasps the unfortunate pressing his hand upon his chest in a vain endeavor to reach a horrible, piercing, tearing pain within. The patient died as if of a syncope after one of these paroxysms or he may have had several such attacks before death occurred.

The treatment of cases during an epidemic consists of fresh air, sunshine, and removal from place where epidemic occurred. The author says he knows of no other disease, except possibly syphilis or malaria, which is so amenable to proper treatment begun at the proper time as is epidemic beriberi.

The Southern Practitioner, December, 1905.

Diagnosis and Treatment of Gall Stones.—Dr. W. H. Bryan looks upon nausea and vomiting as useful symptoms, for when there is a chronic indigestion there must be a chronic cause that gall-stones may be the cause as pointed out by Moynihan who briefly states "that the most common symptom of gall-stones is indigestion." Nausea and vomiting follow the attack of indigestion, due partly to reflex disturbance of the stomach; and relief often follows vomiting. These symptoms are usually due to the partial engagement of a stone in the cystic duct which is allowed to fall back into the gall bladder when muscular relaxation is produced by the attempts at vomiting. Jaundice is due to impaction of a stone in the hepatic or common duct or to the presence of a stone in the cystic duct sufficiently large to compress the hepatic or common duct; it is also produced by infection of the ducts. It is so valuable a sign when present that it seems unfortunate it should occur so rarely as a symptom. Murphy has found a history of jaundice in only 14 per cent. of his cases.

The causes of gall-stone colic according to Moynihan are as follows:

1. Adhesions of a gall bladder no longer containing stones. There is a circumscribed

peritoneal irritation with abdominal distention, more or less severe vomiting and pain.

2. Adhesions when large stones are present in the gall bladder and the cystic duct is patent.

3. Inflammatory processes in a gall bladder distended by fluid or stones when the cystic duct is occluded by inflammation or by the presence of a stone in the neck of the gall bladder.

4. The transit of a stone through the bile passages.

5. The inflammation of a dilated calculous common duct or its tributaries without impaction of the stone. An attack of colic or of spasm is caused therefore only by an over-exertion, of the nature of a cramp of the muscular wall of the gall bladder or ducts in the onward passage of a foreign body. It is never found as the result of gradually increasing distention of the gall bladder or ducts; it is not aroused by inflammation whether acute or chronic in any part of the bile tract; it is not found in cicatrical stenosis nor in those cases in which a gradually increasing pressure is made upon ducts from without. It is due to sudden blockage of the ducts and to their exaggerated muscular efforts to rid themselves of the foreign body. It occurs only when this body is in transit, as soon as the body becomes fixed the muscular efforts cease and the ducts proceed to adapt themselves to the intruder. Small stones may pass along the cystic and common ducts without pain.

Atlanta Journal-Record of Medicine, December, 1905.

Refilling Prescriptions.—Mr. R. B. Kelley says that the fact that the patient pays the physician a fee does not imply that he comes into ownership of the prescription, because as long as he keeps the prescription in his possession it cannot be of any use to him, but so far as he is concerned it represents an order to the druggist to prepare the treatment desired by the physician and he has no more right of ownership than he would have to the instruments with which the physician performs an operation, removes a tumor, or amputates a limb. He pays the physician to cure him and has no further right to extend to his friends and acquaintances in having the prescription refilled after diagnosing their diseases, and he has no right to have the prescription refilled while under the treatment of his physician unless ordered to do so by the physician, because the physician, as a scientific man, may wish to give a definite amount of a certain drug to produce a certain effect when a continued use of the prescription would defeat his purpose. And he has no right in subsequent illness to again refer to this prescription, as the physician may have prescribed for symptoms that he did not mention and of which the patient knew nothing.

The druggist can have no proprietary right to the prescription, as it is merely through courtesy that he is permitted to prepare the medicine, which he has gained for himself by the confidence reposed in him by the physician and the public.

In a case where the physician desires to continue the same treatment he can easily refer to the prescription by telephoning the druggist.

So when we consider the high standard of the scientific physician and pharmacis of today and that diagnosing, prescribing and compounding are based on strictly scientific principles we must conclude that when the prescription has once been dispensed that it has served its purpose for which it was intended and should be filed exclusively for the physicians reference.

Memphis Medical Monthly, December, 1905.

Chronic Endometritis.—Dr. H. Lee Farris says that chronic endometritis does not necessarily depend upon microbic infection, although any of the infectious forms may become chronic congestion of the endometrium. Any condition which produces an over-supply of blood in the uterus may be looked upon as the real seat of the trouble that marks hyperplastic endometritis as the most common ailment of women.

Symptoms.—Leucorrhea is nearly always present, particularly midway between menstruation, until in advanced stage, when it becomes so slight that the attention of the patient is scarcely attracted to it. The secretion from the body is rather milky while that from the cervix is thick and glairy, resembling raw white of eggs. Reaction alkaline may become blood stained. If there be stenosis of the canal it becomes decidedly purulent, offensive, and irritating, often producing vaginitis. Cramps are another important symptom. The pain may be sharp, of a neuralgic character, particularly if stenosis is present, while others complain of dull, bearing down pains. Bimanual examination shows the uterus to be enlarged, heavier and harder in its consistency, however, if the cause be recent it may be softer than normal. The cervix is larger, longer, and of a dark red or purplish hue. Memorrhagia and metrorrhagia generally follow, though in very weak or anemic patients amenorrhea is the most common. Sterility is the rule in all but the mildest forms, yet some portions of the endometrium may be sufficiently normal to receive the ovum in many cases. Disturbances of nervous and gastrointestinal character are common. Treatment is prophylactic, medicinal and surgical. The prophylactic and

medicinal consist mainly of proper exercise, limited sexual intercourse, wholesome food and tonics, while in the surgical treatment we look for a removal of the cause. If the case be wholly endometrium dilitation and curettage with irrigation, followed by a swabbing with Churchills tincture of iodine and again douching with antiseptic solution, slight packing with gauze to be removed within 24 hours, and patient kept in bed at least 6 days. If there be other causes, such as injuries during childbirth, uterine displacement, surgical treatment of pelvic inflammations or abdominal cavity these must be looked to in conjunction with curettage if you would obtain the best results.

Remarkably good results are obtained by the use of the positive pole of copper electrode in the uterine cavity with a current of eight to fifteen milliamperes from five to ten minutes. This is especially good treatment in the milder forms, which refuse operative measures, in ulceration of the cervix and cervical canal, and is very stimulating after curettage in the more marked and stubborn cases. Farradic currents may be given in the cases where the nervous element is an annoying factor.

The Alabama Medical Journal, December, 1905.

Urethral Stricture.—Dr. J. E. Dedman reminds us that perhaps no malady that male subjects are heirs to is of more vital interest than stricture of the urethra. Appalling for its frequency, insidious in its onset, painless in its formation, deceptive as to its extent, rich in its complications, frightful in its results it becomes at once not only one of man's worst enemies, but through him a menace to womankind. The author has observed cases where men affected with stricture and ignorant of the fact married and in course of time a reactionary inflammation set up about the seat of the stricture gonococci which had lain dormant for years sprung into action and flared up an acute or sub-acute gonorrhoea, thus infecting the innocent wife. This question of gonorrhoeal infections in women is being discussed extensively by gynoecologists but no reliable statistics have been compiled as yet showing the large number of pus tubes, inflammations of the cervix and endometrium, which are the results of gonococci. It is time the profession as well as the laity begun to realize the gravity of every case of gonorrhoea and more thoroughly grasp its far-reaching pathologic possibilities.

The author has in this paper gone over the subject from the pathologic and bacteriologic standpoint and also a concise and scientific account of the treatment. Besides this he has called attention 1. To the large number of men affected at some time in their lives with gonorrhoea 2. To the large number of these cases that through imperfect treatment neglect sexual and alcohol excesses. 3. To the very serious conditions that accompany and follow in the wake of strictures. 4. To the necessity for a better and earlier diagnosis of stricture. 5. And for a more comprehensive and scientific treatment, thus avoiding the serious complications that are sure to ensue and which may perhaps result either in death or a protracted period of invalidism, to end which death would be a sweet relief.

The Virginia Medical Semi-Monthly, December 22nd, 1905.

New and Most Efficacious Method of Removing Fancial Tonsils.—Dr. Clarence R. Dufour points out that the diagnosis of hypertrophied fancial tonsil is usually made by the general practitioner. Tonsils can, however, be diseased and exert their bad effect upon the system when not enlarged, even when so small that they cannot be seen—even when so small that they cannot be seen unless the fancial pillars be pulled aside and the submerged tonsil lifted out of its bed. Therefore, all diseased tonsils are not enlarged. These tonsils are usually degenerated, filled with necrotic matter and various disease germs which are absorbed into the system through the vascular current and lymphatics and produce a chain of symptoms which as a rule disappears when they have been thoroughly removed.

The proper method to remove the fancial tonsils, whether enlarged or not, is to enucleate them, i.e., take out the entire tonsil. The author never uses a tonsillotone, he believes it is clumsy, takes up too much room in the mouth, obscures the field, and altogether is unfitted for the thorough removal of the tonsils. A submerged tonsil cannot be removed by it, not even a piece of it.

The method used in children is an anesthetic is given, mouth gag inserted, then with proper instruments the tonsil is loosened from any attachments to the pillars. Then with a tenaculum or forceps pull the tonsil well out of its bed, slip the wire of a snare made for the purpose over it well down to the base, then with one stroke enucleate it. It is by far the best method and one less likely to cause much hemorrhage, as you cut through the base of the tonsil where there are few blood vessels. Never be content to simply cut off a piece of tonsil with the tonsillotone—it is not good surgery. It would be like leaving part of the appendix when doing an appendectomy.

If there are adenoids to be removed at the same time with the fancial tonsils remove

the latter first, then the adenoids, as the blood will not obscure the field and prevent the proper removal of the fancial tonsils.

The after treatment consists in spraying the throat with an antiseptic, keeping the patient in the house for several days, giving soft nourishing food. A laxative should be given the day after the operation and the parents warned that the patient may vomit some blood which he had swallowed. The shock of the operation to the patient is slight and recovery rapid. If the operation is done in the hospital as a rule he can be taken home in a few hours.

Texas Medical Journal, December, 1905.

Surgeons and Damage Suits.—By Dr. J. W. Kenn, San Antonio, Texas.

The Mobile Medical and Surgical Journal, December, 1905.

Movable Kidney and the Indications for Nephrophexy.—Dr. R. L. Payne believes that although there are many cases of movable kidney without symptoms, in a certain proportion of cases the following symptoms may be noticed. The first and most distressing of these symptoms are dragging pains in the loin and lower abdomen, or the affected side, due to the weight of the displaced organ, and in many of these cases this symptom is so constant and wearing in its nature that the patient has probably discovered the presence of a body possessing abnormal movement in the abdomen and learning from experience the relief to be obtained by rest in bed has lapsed into semi-invalidism. The next most common symptom is the interference with the outflow of urine due to the bending, even to occlusion, of the ureter. The urine being retained distends the pelvis of the kidney, giving rise to attacks of severe pain, accompanied at times by symptoms of shock, vomiting, and other disturbance of the digestive organs. Dietls crises and if unrelieved giving to a somewhat intermittent hydronephrosis. The interference with the circulation by kinking of the vessels as the organ swings lower and lower leads to chronic congestion of the kidney, more or less constant hematuria, or finally to nephritis with all its attendant symptoms.

Unless there is some definite contraindication there is only a question of surgical interference to be considered. When the displaced organ is really giving rise to pain and other unpleasant and dangerous symptoms it is useless to prolong the agony by bandages, specially dressed trusses, pads, corsets, and other paraphernalia, which are supposed to lend support to the displaced organ. It is utterly impossible to hold the movable organ in place in this way without making injurious pressure on other parts and such appearances only seem to keep the attention of the patient fixed on the existing condition and to accentuate the neurasthenic tendencies. The same thing may be said of prolonged rest in bed, which is sometimes advised. For simple movable kidney, without other pathological condition, nephrectomy is only to be mentioned to be condemned. Better bear the pains and discomforts of increased mobility than run the risk of removing so important an organ, for not only may there be only one kidney present, but there is always a risk that the function of the remaining kidney may become impaired at any time and the patient left with no chance of life. As to the various operations recommended for nephropexy as a rule the operation should be done extraperitoneally, and whether the organ be fixed by the method of Hobu, Tuffier, Edelohls or others is largely a matter of individual choice, any one of them giving excellent results if properly performed.

The Texas Medical News, December, 1905.

A New, Safe, Certain and Convenient method of Generating Formaldehyde Gas.—According to E. P. Schoet, Ph. D., the method given below has the advantages of not requiring any special form of apparatus, of cheapness and freedom from danger of fire. The method was first described by H. V. Walker, Brooklyn, N. Y.

The following substances are required: Good quicklime in lumps, commercial sulphuric acid and ordinary 40 per cent. formaldehyde solution. A shallow vessel of earthenware or metal is all the apparatus necessary. Sulphuric acid may be sold by any drug store for 10 cents a pound and 40 per cent. formaldehyde solution for 40 or 50 cents a pound. For every 1000 cubic feet of space are required one pound of formaldehyde solution, one-half pound of sulphuric acid and three pounds of quicklime. It has been found that just half of these quantities are enough for 1000 cubic feet, but to guard against excessive loss by leaks these quantities are recommended. The acid and the formaldehyde are first mixed in an earthenware vessel by pouring the acid into the formaldehyde. Then the lime is placed in a shallow vessel in the centre of the room, all openings to the room are carefully closed, the mixture is poured upon the quicklime and the operator leaves the room. The room should remain closed for 5 to 8 hours. Formaldehyde gas has no injurious effects upon fabrics, colors, or ordinary articles of dress or furniture.

The Southern Clinic, December, 1905.

Quinine Sulphate.—By Dr. J. H. Burnett, Cecil, Ark.

The American Practitioner and News, December, 1905.

Nephritis.—Dr. H. R. Manning says there are three cardinal symptoms of nephritis—albuminuria, renal dropsy and uremia. Albuminuria is the most constant symptom and it is held by some that a urine that presents albumen for any length of time is proof positive of Bright's disease, while by others it is recognized that we may run across a functional or physiological albuminuria, and there is more likely to be periods in which there is no albumen in the urine; but even in well established Bright's disease it has been observed that now and then the urine is free from albumen, at the same time exhibiting other evidences of the affection. It is a fact worthy of note that the amount of albumen in a specimen of urine does not always indicate the severity of the kidney affection; for instance in amyloid kidney we may expect to find more albumen than in the parenchymatous or interstitial nephritis, but the prognosis is no more grave in the former than it is in either of the latter. To clinch the diagnosis of nephritis where the urine is persistently albuminous we have only to find the tube casts by microscopical examination of the sedement and the character of these casts determine the kind of nephritis with which we have to deal.

Renal dropsy does not essentially differ from cardiac dropsy and is attributable to the same cause—obstruction to the circulation, especially venous obstruction, and is further explained by the theory that the blood becomes hydremic and the dropsy is a transudate into the tissues.

Uremia, a condition peculiar to nephritis, has had a number of theories advanced to explain its causation, but perhaps the only one that has not been attacked or refuted is that of Traube, who attributes the phenomena to oedema of the brain. An examination of the urine chemically and microscopically when we suspect that a convulsion is of uremic origin should clear up the diagnosis without trouble; and such examination should under no circumstances be neglected where we are called to see a case having had convulsions of an unknown character.

The relationship existing between nephritis and heart disease, especially hypertrophy of the left ventricel they often being associated as cause and effect. Too kidney disease follows valvular disease of the heart for reasons that are easily deduced.

Southern Medicine and Surgery, December, 1905.

Some Preliminary Notes of a Case of Tubercular Nephritis, with Nephrectomy and Subsequent Incontinence.—By Dr. J. H. Hopheimer, M. D.

The Medical Recorder, December, 1905.

Treatment of Pelvic Floor Lacerations.—Dr. J. C. Willis gives as the causes of pelvic floor lacerations; first, a relative disproportion in the size of the outlet of the parturent canal and that of any part of the foetus that cannot escape without tearing the least resistance border; second, in precipitate labors in which the foetus is expelled rapidly through the parturent canal that the parts do not have sufficient time to properly dilate for its passage; third, any abnormal mechanism of labor as in presentations in which the head presents the largest instead of the smallest diameters as it happens in insufficient flexions of vertix presentations, or you may have a reverse condition in which over-flexion of the head will bring it down directly against the center of the perineum; also cases in which a straight pelvis allows the head to press directly against the center of the perineum instead of directing it forward toward the vulvular opening contributing largely to the injury. Furthermore an abnormally rigid perineum which may be independent of any of the above causes or conditions may contribute largely to injuries of the pelvic floor, and especially is this liable to be the case in primipares over 35 years of age who proverbally have rigid perinei.

The tears within the pelvic floor are most liable to be overlooked, and more real injury has been done the pelvic support and the excretion of involution instead of having good drainage are held, as it were, in a pocket in the floor of the pelvis and absorbed into the system instead of being properly drained as they should.

The author, however, regards the prophylactic treatment as most important, which consists in recognizing and treating each individual condition, as it presented itself as a probable etiological factor in a given case with special reference to giving the perineum sufficient time to dilate to its fullest capacity, which is best done by holding back the descending head until such time has elapsed by pressing it firmly upward, backward, and against the pubes, and at the same time holding in check excessive pains and relaxing the perinei muscles to the fullest extent by the free use of general anesthetic, which will also tend to hold in check excessive action of the powerful voluntary muscles of the abdomen, which are very important factors in the management of these cases.

New Orleans Medical and Surgical Journal, December, 1905.

A Talk on X-Rays with Illustrations—Dr. N. F. Thiberge regards the X Ray for

epitheleoma of the skin as an ideal treatment, but regrets to say that epitheleoma on mucus surfaces is not so easily influenced. Of special interest are the results attained in recurring malignant growths of the breast. In those cases where treatment has been instituted directly after excision all attempts at recurrence were checked by the rays, but a reappearance in the other breast or signs of mediastinal or pleural involvement was noticed forcing one to conclude that the ideal treatment in these cases is: Never let the rays take the place of a radical operation, but excise as early as possible a few days after which ray the wound, the other breast, the mediastrinum and the axillary and clavicular glands. The following ailments were benefited by the Xs Ray: Tubercular glands, tubercular peritonitis, general tuberculosis, phthisis, scar-following operations and burns, pain of cancer and of chronic ostitis, neuralgias, chronic colitis and urethral polypus. A case of extensive psoriasis was clinically healed with eight or ten applications.

After three years work in this branch of medicine the author gives the following conclusions:

(1) The rays ssem to have a special stimulating effect on nutrition in both extremes by absorption of malignant growth (a product of hypernutrition) and a substitution of low grade tissue like scar tissue (correcting a product of undue nutrition.)

(2) The rays possess a selective action on lymphatic tissue.

(3) Sarcoma shows rather a greater resistance to X-Rays than carcinoma. Is this due to the fact that sarcoma is more independent of the lymphatic system than carcinoma?

(4) The diagnostic value of the X-Rays even in minute changes has been established and that the future to the operation in the therapeutic field is very encouraging; that with more accurate apparatus and more thorough study of the composition of the X-Ray spectrum we will succeed to convert the transient but marked initial improvement noticed in malignant disease of the breast into a permanent cure. The writer considers it our duty to make more effort for these poor patients. We all know that an alarming percentage of these growths recur after excision and that when they do recur it means death. The only hope offered them is the X-Rays.

Book Notices.

Sexual Neurasthenia (Nervous Exhaustion) Its Hygiene, Causes, Symptoms and Treatment, with a Chapter on Diet for the Nervous. By George A. Beard, A. M., M. D., Formerly Lecturer on Nervous Diseases in the University of the City of New York; Fellow of the New York Academy of Medicine; Member of the New York and Kings Counties Medical Societies of the American Medical Association, of the American Neurological Association; Author of "Our Home Physician," "Hay Fever," "Stimulants and Narcotics," "Eating and Drinking"; One of the authors of "Medical and Surgical Electricity," etc. Edited with notes and additions by A. D. Rockwell, A. M., M. D., Neurologist and Electro-Therapeutist to the Flushing Hospital; Formerly Professor of Electro-Therapeutics in the New York Post Graduate Medical School and Hospital; Fellow of the New York Academy of Medicine; Member of the New York Neurological Society; One of the authors of "Medical and Surgical Electricity," etc. Sixth edition—with Formulas. New York: E. B. Treat & Company, 241-243 West 23rd St. 1905.

The call for still another edition of this well known work sufficiently indicates its popularity and its right to live. The author's records of neurasthenia which now numbers more than a thousand cases, embracing persons in every station of life and all degrees of culture, fail to modify in its essential features the picture of the disease so ably delineated by the acute and original mind that first formulated its symptoms. In the management of these cases, however, there is always something new to learn, and this call for a sixth edition affords an opportunity long desired to direct attention to the symptoms of incontinence of urine in its relation to neurasthenia and enables the author to describe a method of treatment which has yielded remarkably good results. In a limited number of cases there is unquestionably a close relationship between incontinence as a causative factor and neurasthenic symptoms, and in these cases, if we can succeed in relieving the incontinence, we relieve at the same time the local and constitutional neurasthenic symptoms associated with it. This we can often do by the action of the isolated induction shock on the atonic perineal striated muscles, and external sphincter of the urethra, a description of the technique of which is the main feature of the additional chapter. The work is in every respect valuable and should be read by every physician.

Gray's Anatomy, Descriptive and Surgical.

A Text-book of Human Anatomy. By Henry Gray, F. R. S,, Lecturer on Anatomy at St. George's Hospital, London. New American from the Fifteenth Eng-

lish Edition. Thoroughly revised and largely re written by J. Chalmers Da Costa, M. D., Professor of Surgery in Jefferson Medical College, Philadelphia, with the Collaboration of a corps of specially trained assistants. In one magnificent Imperial Octavo Volume of 1600 pages, with 1132 illustrations in Black and colors. Price, with illustrations in Black and colors, cloth $6.00, net; full leather, $7.00, net. Price, with illustrations in black, cloth, $5.50, net; full leather, $6 50, net. Lea Brothers & Co., Publishers, 706-8-10 Samson St., Philadelphia. 111 Fifth Ave., New York.

Gray has been not only the leading textbook on its own subject, but also the most important and best known work in all medical literature in every language, for nearly fifty years. In every English speaking country the author's name has become so completely identified with the subject of his work that the names "Gray" and "Anatomy," are, to all intents and purposes, synonymous. Henry Gray died young, but he left as his great masterpiece this great work, showing not only his profound knowledge of the human structure, but also his marvelous skill in presenting this knowledge for ready assimilation by other minds. The rapid growth and progress of anatomical knowledge has been represented in the frequent revisions of Gray by leading anatomists on both sides of the Atlantic. None, however, has been so thorough, searching and critical as the present one by Dr. Da Costa, who combines in rare degree the qualifications of anatomist, surgeon and teacher. This revision has been so thoroughly done that the entire volume has been re-written and re-set in new type. Changes will be especially noted in the section on brain, spinal cord, nervous system, abdominal viscera, lymphatics, etc. The new momenclature (B. N. A.) is given in brackets following the current momenclature, thus serving the needs of a far greater number of readers than if one system only was used. The superb illustrations in nearly every instance bear the names of the parts engraved upon them, whereby their position, extent and relations are obvious almost at a glance, thus saving the reader the trouble, delay and eye-strain caused by reference lines and letters. Different colors in the engravings show the muscle origisn and insertions, veins, arteries, nerves and lymphatics. Of the 1132 illustrations in this edition no fewer than 500 are new. No care or expense has been spared to keep Gray as the foremost and easiest and best book from which to learn or to teach, as well as the unrivalled reference work for practitioners of medicine and surgery. The editor has, in order that its pages might represent the world's best knowledge, American, English, French and German Anatomical works have been freely consulted, proper credits being given to the original source.

Practical Dietetics with reference to Diet in Disease. By Alida Frances Pattee, Graduate Boston Normal School of Household Arts; Late Instructor in Dietetics, Bellevue Training School for Nerves, Bellevue Hospital, New York City; Special Lecturer at Bellevue, Mount Sinia and the Hahnemann Training Schools for Nurses, New York City. Third Edition. A. F. Pattee, Publisher, 52 West 39th street, New York City.

The author of this book has for a great many years been instructor of Dietetics in various large hospitals and has had every opportunity to get experience sufficient to write a book of this character. The preparation of food is a science as well as an art, the chemistry of which is as precise as the chemistry of the laboratory. When we are willing to be as exact and careful in this work as we are in chemical experiments, our success will become a certainty. No other technical art can, with so little practical knowledge, go as far in simplifying that which is otherwise complicated and laborious and do more towards accomplishing that which is a chief result of all science —adding to the comfort and happiness of the human race.

The book contains 312 pages and is neatly bound in cloth and makes a very nice appearance. The price is about $1.50. It gives us pleasure to recommend the book.

The Man of the Hour. By Octave Thanet. Bobbs-Merrill Co,, Publishers, Indianapolis, Ind. Price $1.50.

In this book the author gives us pictures of the crookedness of labor leaders and the pros and cons of the contest between labor and capital. This is considered the best book, as it is considered the most serious piece of work, that the author has yet produced. "The Man of the Hour" is a young American whose father is an Illinois plow manufacturer and whose mother is a Russian Princess of the nihilistic stamp. The son inherits the practical sagacity of the father and the radical idealism of the mother. The story centers about his efforts to make the American in him yield to his Russian idealism. Swept off his feet by a generous devotion to the poor, he gives away his fortune, his social position, and temporarily, at least, the woman he loves, to become one of the wage-earning class. His growing conviction that the people of his adoption were unworthy of his sacrifice, and the final triumph of his Americanism make a story

of more than ordinary power. The author also has given us a story full of sentiment and action. The story is thoroughly readable.

The Blues (Splanchnic Neurasthenia) Causes and Cure. By Albert Abrams, A. M., M. D., (Heidelberg) F. R. M. S.; Consulting Physician Denver National Hospital for Consumptives, The Mount Zion and the French Hospitals, San Francisco; President of the Emanuel Sisterhood Polyclinic; Formerly Professor of Pathology and Director of the Medical Clinic, Cooper Medical College, San Francisco. Illustrated. Second edition, enlarged. New York: E. B. Treat & Company, 241-243 West 23rd St. 1905. Price $1.50.

The object of this volume is to direct reference to a new and heretofore undescribed variety of nerve exhaustion, which the author has designated as Splanchnic Neurasthenia. This special form of nerve weakness is characterized by paroxysms of depression of varying duration, and which are specified popularly as "the Blues." The recognition of this special form of neurasthenia is of more than theoretic interest. A mere theory may be of interest to members of our profession, but the laymen ask science for results. The recognition of splanchnic neurasthenia and the factors involved in its causation, imply our ability to cope with the evil and offer to the sufferers not only amelioration, but cure in many instances.

Usually this class of cases are very amenable to treatment. A perusal of the subject matter of this volume will show that the author has referred the origin of this form of neurasthenia in brief to a congestion of the intra-abdominal veins. Man is distinguished from all other mammals by his erect posture. "If an intelligent extra-mundane" says Campbell, "were to see man for the first time in the horizontal posture, it would never occur to him that it is natural for him to be erect. There is something incongruous in an animal built on the longitudinal plan standing and progressing upon one end of its long axis." The erect posture of man places him at a disadvantage in several directions, notably, however, by increasing the height of the blood column with a corresponding increase of gravity on the circulation, thus causing the blood to gravitate into the intra-abdominal veins. Among the many resources of nature to combat this tendency the vigor of the abdominal muscles is paramount. The tonicity of the muscles in question is impaired by malhygienic clothing, occupation, disease, lack of exercise and a host of other conditions. The book deals with interesting ideas like this and is well worth reading.

It contains 255 pages and its illustrations are very beautiful.

Clinical Obstetrics. By Robert Jardine, M. D., Edin., M. R. C. S. England, F. F. P. & S. Glas., F. R. S., Edin. Professor of Midwifery in St. Mungo's College, Glasgow; Senior Physician to the Glasgow Maternity Hospital; Examiner in Midwifery to the Scotch Conjoint Board; Formerly Examiner in Midwifery to the Uniuersity of Glasgow; Late President of the Glasgow Obstetrical and Gynecological Society, etc., etc. With ninety-six illustrations and a colored plate. Second edition. London Rebman Limited, 129 Shaftesbury Avenue, W. C. New York Rebman Company, 1123 Broadway. 1905. Price $4.75.

No doubt this, the second edition of this most magnificent work will receive the same favorable reception that the first edition did. No doubt that in the author's experiences in the second volume will be found improvements. The author has added a considerable number of cases and fifty new illustrations. The number of his eclampsia cases has been increased to thirty. His treatment in this condition is based upon the intra-venous injection of normal salt solution, with of course, diuretics, diaphoretics and purgatives. The illustrations in the book are especially attractive and accurate. The volume is a large handsome one, containing over 600 pages and is carefully indexed.

Postoperative Treatment: An Epitome of the General Management of Postoperative care and Treatment of Surgical cases as practised by Prominent American and European surgeons, together with suggestions concerning the technique of certain operations with a view to securing better postoperative results: By Nathan Clark Morse, A. B., M. D., Surgeon in chief to Emergency Hospital, Eldora, Iowa; District Surgeon and Northwestern and Iowa Central Railways; Ex President Iowa State Association of R, R. Surgeons; Member of the American Medical Association, Pan-American Medical Congress, International Association of R. C. Surgeons, etc. Containing 5 plates and 155 illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1905.

The average graduate knows but little concerning the management of postoperative treatment of surgical cases; most of his time in college being engrossed with what appears to be the more important matter of surgical technique, pathology and bacteriology. He realizes the great importance of minor details only when in actual practice he is thrown upon his own resources and

the skill he may then acquire is obtained through personal experiences with suffering patients. He may visit the greatest clinics and witness the most brilliant operative technique, but the curtain falls and his observation ceases on the removal of the patient from the operating amphitheatre. The author rightly regards postoperative care and treatment as being of equal, if not greater importance than mere brilliant technique. Faulty technique may complicate or retard recovery, but faulty postoperative management has robbed many surgeons of what should have been successful results.

The practice of asepsis and anti-sepsis has removed many complications which heretofore so commonly followed surgical operations. Many surgeons, it is no matter how careful and painstaking they are, will get some of their cases infected. Many times it is unavoidable and occurs in the most favorable instances. It is these cases that tax to the utmost the skill and ingenuity of the postoperative attendant. Surgeons differ radically over the management of similar cases, each basing his opinion on conclusions evolved from personal experience, hence the meagre information given this important subject by the average modern text-book is frequently conflicting and therefore a disappointment to the student and busy surgeon. There is no doubt that the medical profession, especially surgeons have for a long time felt the need of a work of this character. The author, therefore, has compiled a rational system, a text-book or guide to the proper postoperative management or treatment, which so far as I can see is first class in every respect and is the first work devoted exclusively to this subject that has ever been brought before the profession. Of course the character of the work admits of little originality, therefore the book is an epitome of the various methods used or adopted by modern American and European surgeons, much of the information being derived from text-books, medical journals, etc., and the author's own valuable experience.

The book contains 468 pages.

"Heart's Desire." By Emerson's Hough. The MacMillan Co., 66 5th Ave., New York City. Price $1.50.

When you have read Mr. Hough's book you will be sure to be looking for "Heart's Desire" the next time you go through the far West country. And you will be sure you will know it when you see it. Not so much by the look of the valley, or of the hills about it, or of the scattered adobe houses with earthen roofs which line the arroyo, as by the "feel" of the place, by the spirit of unworldliness which it breathes. But it is not likely you will have the good luck to chance upon it. Where you go almost any one else can go as easily, and does go, and so your place, if it ever was "Heart's Desire," is that no longer. For it was because no one, or almost no one except the people of the place itself, knew it that "Heart's Desire" was what it was. Mr. Hough himself was there once; if he wasn't, then he must know some place very like it. Perhaps he is the Learned Counsel of the story. At any rate, he makes us see it through the eyes of one who loves it.

So much for the place. As for its people, you know them and like them from the start, and that ought to be enough. If it isn't, and you ask impertinent questions as to whether they are "the real thing" in cowboys, all I can say is that Mr. Hough is not telling a story of cow punching, but the story of "Heart's Desire" and of how Eve came to it.

By the way, there are two Eves, and the reader is surprised, after a good deal has been done to prepare the way for the first one—the "Littlest Girl," who promises a whole story in herself—to have her married out of hand to the rollicking, impetuous Curly with his crop of red hair and his easy confidence in himself. But then you begin to learn things about Dan Anderson, and instinctively you apprehend that his is to be the real story. Anderson is from Princeton College, and he is in "Heart's Desire" because, as he puts it, there is there "no life, no trouble, no woman." Hearing this, you say to yourself, "He means *the* woman," and you are prepared for the coming of Constance Ellsworth. She arrives with her father, who has money, and who plans a railroad which shall link "Heart's Desire" with the rest of the world. This last is the ostensible reason of his coming. Whatever private reason Miss Ellsworth has for her visit the reader is entitled to know only as he turns the pages of the book. That this other reason, however, is a potent one and quite sufficient to bring about what follows will not generally be questioned.

But to blame a book for what it is not is unreasonable, and just now to ask for a Western story, particularly a story in which there are cowboys, and then to object to the introduction of a pretty girl from the East who has education and fashionable clothes and a heart, is heretical. So to those who would not be satisfied without a Constance and the complicating factor of Porter Barkley, "rival," I shall only say that Mr. Hough has made these last characters do what is expected of them and do it sufficiently well to pass muster. Personally, I like the book for something quite apart from its "plot" or its "love story." I like it for its bits of description and for the talk

among its people, which immediately put one on a footing with real men; which make the hotel of Uncle Jim Brothers plain to the eye; which make one a participant in the trial of Curly for shooting the pig; which make one a witness to that remarkable race in which a cross eyed horse, owing to the ministrations of an osteopath and the ingenious device of its owners, all but wins the prize. Mr. Hough's anecdotes are, many of them, racy of the soil, and if they interrupt the flow of the narrative, they do so very pleasantly. For this same quality no quarrel may be had because some of these anecdotes seem a bit irrevelant—if we except the extraordinary recital of the adventures of the King of Gee-Whiz, which is entirely gratuitous and wholly inexplicable.

Sir Galahad of New France. By William Henry Johnson. Herbert E. Turner & Co., Boston, Mass.

A period of more than usual historical interest is that of the religious warfare and persecution during the lifetime of the unsavory Catherine de Medici, and the attempt of a handful of French Huguenots under Jean Ribaut, backed by the great Admiral Coligny, to found a settlement in what is now Florida. The first expedition failed and a second one formed by Ribaut succeeded in building a settlement which was called Port Royal and for a time succeeded until surprised by the Spaniards and all but exterminated.

The survivors returning to France, by the aid of Sir John Hawkins raised a third expedition to take revenge on the Spaniards, which they happily did and returned to France.

Taking for a background these voyages, William Henry Johnson, the author of a number of historical works, has written a delightful novel in which he sets forth the story of a young Frenchman—not of the swashbuckle, roaring, brawling kind—who went with Ribaut on the first voyage and through mishap was left in the primeval forests where, after wandering many a weary day, he at last fell in with the Indians and enjoyed many an Arcadian day in forest and stream with a beautiful Indian maid as his companion.

Many are the adventures shared by these two, embracing as they do the two French expeditions.

Capital Stories about Famous Americans. Edited by Rev. Louis Albert Banks, D. D. New York: The Christian Herald, 91 to 115 Bible House.

Biography, where the real personality is revealed, is ever the most entertaining and instructive of all literature. This is a biography at magnetic points. It has been the purpose of the author to gather in this vol ume such stories of love, heroism, and adventurous daring, together with lighter incident as would make the personalities of the people discussed, alive and real to the reader. More than half of those whose names are disclosed in the table of contents are yet living among us, and the rest still live in these stories of a vital personal career which make them immortal.

The author has not attempted, in compiling this volume, to make it exhaustive. But he has sought to give the reader stories of interest and variety into which it will always be a pleasure to delve, either for entertainment or instruction.

Transactions of the Association of American Physicians. Twentieth Session. Held at Washington, D. C., May 16th and 17th, 1905. Volume XX. Philadelphia: Printed for the Association. 1905.

The Transactions of this Association is always received with much pleasure. This year the volume contains 548 pages and is neatly and attractively gotten up in its uniform binding. The volume contains many beautiful illustrations and articles by men well known internationally as well as nationally.

Dr. Frank Billings, of Chicago, Ill., is president and Dr. Henry Hun, of Albany, N. Y., is secretary.

Preventitive Medicine Including a Disquisition on Therapeutic Philosophy. By William Colby Cooper, M. D. Published by the Author. Cleves, Ohio. 1905.

This book deals with preventitive Medicine and is very interesting. As a whole it is a valuable little book. It hits each school of medicine about equally hard and accords to each sect all the credit and honor due it. No doubt the book will be received in the kindly spirit in which it is written. It will appeal to the majority of thinking santarians, doctors and educators. It is very nicely bound and has 150 pages.

Lectures on Auto-Intoxication or Self-Poisoning of the Individual. By C. H. Bouchard, Professor of Pathology and Therapeutics; Member of the Academy of Medicine and Physician to the Hospitals. Paris. Translated with a Preface and New Chapters added by Thomas Oliver, M. A., M. D., F. R. C. P., Professor of Physiology, University of Durham, Physician to the Royal Infirmary, New Castle-upon-Thyne; Former Examiner in Medicine, Royal College of Physicians, London. Second Revised Edition. Philadelphia: F. A. Davis Company, Publishers. 1906. Price, $2.00 net.

The author has placed this revised translation of Professor Bouchard's "Lectures

on Auto-Intoxication in Disease" before the medical profession of the country in a very practical and attractive form. The author deals in his "Auto-Intoxication" with subjects of every-day interest to the practitioner. Many of the facts herein alluded to can no longer be ignored. Putrefactive processes in the intestinal canal and the development of physiological and pathological alkaloids play an important part in many disease processes until lately unknown or misunderstood. These lectures may therefore be regarded as an inquiry into the operation of poisons introduced from without or generated within the body of man, and the part they play in health and disease. No subject commands a greater interest; none demands more serious study. Death frequently carries off in a few hours or days individuals who are in the prime of life and in apparent good health, and at the autopsy the most careful examination fails to reveal alterations of structure such as can explain the fatal stroke. Consequently subjects treated in this volume are intensely interesting and valuable. It would be well enough for every physician to carefully read this book. Many valuable and practical ideas can be found in it. The volume contains 348 pages and is nicely bound and indexed.

Pharmacology and Therapeutics. By Reynold Webb Wilcox, M. A., M. D., LL. D. Professor of Medicine at the New York Post-Graduate Medical School and attending physician to the Hospital; Consulting Physician to the Nassau Hospital; Visiting Physician to St. Mark's Hospital; Ex President of the American Therapeutic Society; Fellow of the American Academy of Medicine; Vice-Chairman of the Revision Committee of the United States Pharmacopoeia, etc. Sixth Edition based on the fifth edition of White and Wilcox's "Materia Medica and Therapeutics." Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1905.

In revising Dr. White's Materia Medica and Therapeutics to bring it into harmony with the United States Pharmacopoeia so much additional matter has been introduced into the five American editions that it has seemed advisable to re-write the book entirely. The eighth decennial revision of the Pharmacopoeia has given the opportunity. The many advances in the subjects here treated have necessitated the division of the work into two distinct parts, the first being devoted to Materia Medica and Pharmacy, and this, the second, to Pharmacology and Therapeutics. It is expected that this natural separation of the subjects will be acceptable to the physician and the student. In the present work the classification employed is based on the particular physiological systems upon which the various drugs or other agents principally act. There is a complete list of drugs and preparations, without special description, except as to dosage, and very elaborate accounts of their physiological action and therapeutics are given. In these descriptions the effort has been made to present the latest views of the highest authorities in these departments, and to render the book as practically useful as possible by full details regarding treatment. The two works combined offer, it is believed, a very complete and up to-date presentation of the whole subject of Materia Medica and Therapeutics.

The book contains 1010 pages and is nicely gotten up.

The Physicians' Visiting List for 1906. P. Blakiston's Son & Co. Philadelphia.

For the fifty-fifth time this old friend makes its timely appearance. The visiting list proper is presented in the regular, the perpetual and the monthly edition. It is bound in black leather, as usual, and is in every way convenient.

The new United States Pharmacopoeia makes many changes in the strength of drugs and preparations, reducing some, increasing others as much as double. The law recognizes the current U. S. Pharmacopoeia as the standard. To avoid accidents and damage suits on the one hand, and puzzling lack of results on the other, both the druggist and doctor must follow the same standard. As a convenient pocket reminder of these changes, the importance of which must be at once obvious to every physician and pharmacist, Messrs. Lea Brothers & Co., the Medical Publishers, of 706-8-10 Sansom Street, Philadelphia, and 111 Fifth Avenue, New York, have issued for free distribution a carefully prepared leaflet giving an alphabetical list of the important changes. The strength of each preparation listed is given as in both the old and the new U. S. P.

To aid in preventing untoward or negative results in the use of powerful drugs this leaflet will prove handy and valuable.

A postal card request will bring a copy to any physician, druggist, student or nurse.

Announcement.

The Scudder Brothers Company, Cincinnati, Ohio, will issue early in February a new Eclectic Practice of Medicine, by Rolla L. Thomas, M. D., Professor of Practice of Medicine, in the Eclectic Medical Institute, Cincinnati, Ohio.

This work will embrace over 1000 octavo pages, and will contain two full page lithographs, five full page color prints and fifty illustrations in black. Cloth $6.00, sheep $7.00.

Man and His Poisons. A Practical Exposition of the Causes, Symptoms and Treatment of Self Poisoning. By Albert Abrams, A. M., M. D., (Heidelberg), F. R. M. S., Consulting Physician Denver National Hospital for Consumptives, The Mount Zion and the French Hospitals, San Francisco; President of the Emanuel Sisterhood Polyclinic, Formerly Professor of Pathology and Director of the Medical Clinic Cooper Medical College, San Francisco. Illustrated. New York. E. B. Treat & Company. 241-243 West 23rd Street. 1906. Price $1.50.

The subject of self-poisoning has advanced from a plausible and fascinating theory to a verity. Although there is much concerning the subject about which we know little and are not very sure of that, yet intestinal self-poisoning is sufficiently understood to furnish adequate data for its successful treatment. To one conversant with the subject, the contention of Bouchard is apposite—that man is constantly standing, as it were, on the brink of a precipice and continually on the threshold of disease. The human body is a receptacle and laboratory of poisons and every moment of his life man is exposed to the danger of being overpowered by poisons generated within his system. Many bizarre and protean diseases owe their origin to self-poisoning, but so alluring has been the germ theory of disease that it has annihilated any initiative seeking the causation of disease from any other source. Nervous and mental diseases are often dependent on poisoning from the alimentary canal, and while such evidence is not always corroborated scientifically the beneficial effects resulting from treatment based on this theory are sufficiently convincing. Many neurasthenics fully appreciate the observation of Hugo, "It is nothing to die; but it is frightful not to live." The sufferings of a neurasthenic are best portrayed by defining hell as a place where immortality is conferred on the nervous system. The tale of a neurasthenic reads like a patent medicine advertisement. The symptoms of self-poisoning are mainly objective, and for this reason are overlooked by the patient and disregarded by the physician. The author has endeavored to present in clear terms and in concise form the fundamental principles of the subject and therefore eliminated subject matter of more interest to the theoretician than the practician. Special attention has been directed to the sinu-soidal current to show that its effects are disassociated with suggestion. Repeated reference is made to the principles of psychotherapy, for the mind is an important factor in influencing the body for weal or woe. The indifference of physicians concerning psychotheraphy has called into existence many pseudo mind-cures. Dr. De Fleury in "Mind and Medicine" says, "In neglecting the systematic and scientific employment of mental influence in the course of disease, medical practitioners throw aside a weapon for combating it more powerful than all the drugs in the pharmacopoeia." To eschew a remedy because we cannot guage its material properties may be an act worthy of the scientist, but the aim of the physician is to cure his patient by legitimate means, however unscientific. It is the attitude of the scientist which makes it possible for the quack to thrive.

The book is very neatly gotten up and contains a complete index and 268 pages.

A Systematic Treatise on Materia Medica and Therapeutics with reference to the most direct Action of Drugs. By Finley Ellingwood, M. D., Professor of Materia Medica in Bennett Medical College, Secretary of the National Eclectic Medical Association, Author of "A Synopsis of Medical Chemistry," "Manual of Urinalysis," Editor of Chicago Medical Times. With a condensed Consideration of Pharmacy and Pharmacognosy by Prof. John Uri Lloyd, Ph. M., Ph. D., late President Pharmaceutical Association, Professor of Chemistry and Pharmacy in the Eclectic Medical Institute of Cincinnati. Author of "Etidoryha." Fifth Edition, Thoroughly revised and Greatly enlarged. Published by the Chicago Medical Times Publishing Co., 100 State Street, Chicago. 1905.

The previous editions of this book have been very satisfactory. This has been demonstrated by the fact that the previous editions have been quickly exhausted. The author has wisely concluded that the sixth edition has brought us to the time when so much additional work in the line of investigation has been accomplished, that the sixth revision is necessary. The former editions of this book have had a phenomenal reception from the entire profession of medicine in the United States. It is accepted as a most advanced authoritative presentation of the therapeutics of the indigenous remedies of our country, and as presenting a new and intensely practical method of drug application. The originality of the method of classification and the generally attractive character of and presentation of the text has appealed to every reader and has won enthusiastic appreciation and approval from all. The work has been adopted and advised for reference by the entire medical profession. In this volume several of the articles are re-written; about forty remedies not included in the first volume are intro-

duced in full and recent investigations of, and the most advanced knowledge concerning, about sixty of those previously introduced are added.

The index is re-written and greatly enlarged. The book contains 811 pages and is very attractively bound.

Transactions of the New Hampshire Medical Society at the One Hundred and Fourteenth Anniversary, held at Concord, May 18 and 19, 1905. Concord, N. H. Ira C. Evans Co., Printers. 1905.

The Transactions of this society come to us this year in its usual attractive style. This volume contains 303 pages and is very beautifully bound. The president of this society is Dr. F. A. Stillings, of Concord, N. H., and the secretary is Dr. Ira J. Prouty, of Keene, N. H. The secretary has shown that he is a very capable official —he has done his work well.

Thornton's Pocket Medical Formulary (heretofore known as The Medical News Pocket Formulary) new (7th) edition, revised to accord with the new U. S. Pharmacopœia, containing more than 2,000 prescriptions with indications for their use. In one leather bound volume. Price, $1.50 net. Lea Brothers & Co., Publishers, Philadelphia and New York, 1906.

The changes in the new Pharmacopœia were many and important. Some medicinal preparations were nearly doubled in strength and their doses proportionately reduced; others were much weakened and doses increased. Hence the new edition of Dr, Thornton's Formulary, revised not only to include all the newer drugs but also to accord with the new Pharmacopœia, appears most timely and its importance is obvious.

It is not presumable that any physician will depend entirely upon a pocket formulary in treating his patients, but that there is a broad and legitimate field of usefulness for works of this character is self-evident. Even the best informed physician may at times overlook an appropriate drug, and a young practitioner will perform his duty better, both to his patient and himself, if he has at hand the collective experience of the profession.

The opportunity for frequent revision is obviously of special value in the case of works dealing with a subject which advances so rapidly as Therapy. In each of the seven editions which have now been demanded the author has striven to embody the latest and best information, so that the profession may consult this handbook with confidence of finding it always up to date.

Thornton's Formulary, besides being accurate, trustworthy and up to date, affords other advantages which can be found in no other book of its nature.

It is arranged alphabetically and the best therapeutics of the masters is therefore instantly and handily at command in its pages. A peculiar and valuable feature is found in the discriminating annotations. The various stages and complications of disease require treatment adapted to the conditions they present, and rational and successful therapeusis must recognize this fact. In a few clear words Dr. Thornton points out the special utility of each of the various prescriptions recommended under the headings of the respective diseases. The book opens with 16 pages of useful data such as incompatibles, poisons and antidotes and a table of maximum and minimum doses. With this handy volume in his pocket, the practitioner need never feel at a loss for a pertinent suggestion.

Transactions of the Indiana State Medical Association, 1905. Fifty sixth Annual session held in West Baden, Indiana, Wednesday, Thursday and Friday, June 7th, 8th and 9th, 1905. Indianapolis. Wm. B. Burford, Printer and Binder. 1905.

The transactions of this association this year contains 576 pages. The volume is nicely bound in cloth and well indexed. The president is Dr. George T. McCoy, of Columbus, and the secretary and editor of the volume is Dr. F. C. Heath, Indianapolis.

A Laboratory Manual of Physiological Chemistry. By Elbert W. Lockwood, M. D., Ph. D., Professor of Chemistry and Toxicology and head of the Department of Chemistry in the University of Iowa; Author of an introduction to Chemical Analysis for students of Medicine, Pharmacy and Dentistry. Second edition revised and enlarged, with one colored plate and three plates of microscopic Preparations. Price, $1.00 net. Philadelphia. F. A. Davis Company, Publishers. 1906.

In no department of biology have the advances of recent years been more marked than in that which is studied under the name of physiological or biological chemistry. While the subject has always been regarded as important in the study of the vital processes, its value is being more than ever emphasized as fundamental in a biological or medical education. A revision of this manual, with the addition of new material, has therefore seemed advisable. No change has been made in original plan, but suggestions arising from the experiences of the author's colleagues have been adopted wherever they have promised to add to the success of the work. The book is attractively gotten up and is valuable.

The Principles and Practice of Medicine: Designed for the Use of Practitioners and Students of Medicine. By William Osler, M. D., Regius Professor of Medicine, Oxford University; Honorary Professor of Medicine, Johns Hopkins University, Baltimore; Formerly Professor of the Institutes of Medicine, McGill University, Montreal, and Professor of Clinical Medicine in the University of Pennsylvania. Sixth Edition, thoroughly revised from new plates. New York and London: D. Appleton & Company. 1905. Pp. 1143, octavo.

The sixth edition of this well-known and popular work appears with so many changes that it may almost be considered a new book.

While the amount of reading matter has been much increased, the use of new type and a larger page, have enabled the publishers to keep the bulk within the limits of a single compact volume

The work is a reflex of current knowledge in the symptomatology and treatment of disease, based upon the literature and upon the author's experience, at the medical clinic of the Johns Hopkins Hospital.

Dr. Osler's work is so favorably looked upon by the profession, that it is not necessary in this notice to more than announce the publication of a new edition.

The Psychic Treatment of Nervous Disorders. (The Psychoneuroses and Their Moral Treatment.) By Dr. Paul Dubois, Professor of Neuropathology at the University of Berne. Translated and edited by Smith Ely Jelliffee, M. D., Ph. D., Visiting Neurologist, City Hospital; Instructor of Materia Medica and Therapeutics, Columbia University, New York; and William A. White, M. D., Superintendent Government Hospital for Insane, Washington, D. C.; Hrofessor of Nervous and Mental Diseases, Georgetown University, Washington, D. C. Price, $3 00, net. Funk & Wagnalls Company, New York and London. 1905.

This will be found at once one of the most interesting as it is one of the most important subjects in medicine. The author and translators are men of international reputation and the work will be found to fill a want that has not heretofore been supplied.

Christianity and Sex Problems. By Hugh Northcote, M. A. Crown octavo, 257 pages. Bound in extra cloth. Price $2.00, net. F. A. Davis Company, publishers. 1914-16 Cherry street, Philadelphia, Pa.

This book is an interestiug one. The author is evidently master of the subject which he discusses.

Nasal Sinus Surgery with Operation on Nose and Throat. By Beaman Douglas, M. D., Professor of Diseases of the Nose and Throat in the New York Post-Graduate Medical School and Hospital. Illustrated with 68 full-page half tones and colored plates including nearly 100 figures. Royal octavo 156 pages. Bound in extra cloth. Price $2 50 net. F. A. Davis Company, publishers, 1914-16 Cherry Street, Philadelphia, Pa,

This little book on nasal surgery with operations on nose and throat has been written because of demands made for such a work by physicians who have worked under the author's direction. We feel confident that it will be useful to many others and we take pleasure in recommending the work. Its illustrations are beautiful. It is comyletely indexed and nicely bound.

The Physical Examination of Infants and Young Children. By Theron Wendell Kilmer, M. D., Adjunct Attending Pediatrist to the Sydenham Hospital; Instructor in Pediatrics in the New York Polyclinic Medical School and Hospital, New York; Attending Physician to the Sumner Home of St. Giles, Garden City, New York. Illustrated with 59 half-tone engravings. Philadelphia. F. A. Davis Company, publishers. 1906. Bound in extra cloth. Price 75 cents.

The physical examination of infants and young children is a subject in which nearly all the text-books on pediatrics are deficient. The training of most physicians has been along the lines of the physical examination of the adult, and it is in the knowledge of the physical examination of children that the average practitioner is deficient. We must forget and unlearn all things we ever knew about adults when we come to the examination of children. They are entirely a different proposition. It is common knowledge to know that the great secret in the treatment of diseases is to first make a correct diagnosis. The author of this little book has had a great deal of experience chiefly in post-graduate schools, in the examination of infants and young children and he has noticed the deplorable ignorance of most students and physicians as to the methods of examination of babies. This observation has led him to write this little volume. The author makes no pretenses as to outlining physical diagnosis nor pathological conditions of any kind whatever; his only aim is to instruct the student and physician how to examine a baby.

Abstracts of the Leading Articles of the Month.

Oxygenated Water in Dermatology and Urology.

Scholtz (British Medical Journal) has used 30-per-cent. oxygenated water in the following affections: (1) Ulcerative processes of the skin, especially when gangrenous; (2) ulcerative stomatitis, especially when purulent and ulcerative. In these cases a mouth-wash of two or three per cent. is used, and a strong solution painted on the gums daily. (3) Suppurating buboes and gangrenous or serpiginous forms of soft chancre; (4) buccal leucoplasia, when the solution is painted on either alone or with nitrate of silver; (5) comedones, acne, syphilides, and other pigmentary conditions have sometimes given good results; (6) in several forms of cystitis an injection of one to three per cent. of the solution was used. In chronic gonorrhoea and post-gonorrhoeal urethritis injections of one-half- to one-per-cent. solution, generally combined with nitrate of silver 1 in 1000 to 1 in 4000, gave good results. The injections lasted one to five minutes, and from 150 to 600 cubic centimeters of the solution were used.

The Causes of Sudden or Rapid Death in Pneumonia.

Ferrien (Revue mensuelle des maladies de l'enfance) discussing the causes of sudden death in children with pneumonia summarizes as follows:

1. Extra pulmonary localizations are frequent, especially before the age of two years. Pericarditis, usually suppurative, is frequently encountered. It is often latent and may determine rapid death.

2. Sudden or rapid death may be observed at every age with or without extra pulmonary localization; it is, fortunately, not a frequent accident. This possibility, in a certain degree, allies pneumonia of the child with other affections, such as diphtheria and typhoid fever, in which sudden death has been observed.

3. Cyanosis is often the first sign which reveals the imminence of a fatal termination and may be an indication of a pericarditis or of a simple acute dilatation of the heart.

Note on the Treatment of Cancer by Radiotherapy.

Valude (Ann. d'Oculist) mentions four cases, representing the various types of skin cancer affecting the external portions of the eye. Three were treated exclusively by radium and one by radium followed by the X Ray.

Case 1.—Rodent ulcer recurrent after treatment by caustics and operation. The ulcer was oval with indurated borders and adherent crusts. Applications of radium failed entirely to check the disease or even to relieve the excruciating pain.

Case 2.—An indurated lump surrounded the entire inner angle of the right eye. The conjunctiva of the lower lid and the inner angle was the seat of a waxy new formation. The lid could scarcely be opened. Ten applications of a tube containing ten milligrams of bromide of radium resulted in notable diminution of the infiltration surrounding the cutaneous module and increased ability to open the lids. The unhealthy conjunctiva did not show any distinct improvement. Treatment by radium was then supplemented by twenty X-Ray sittings. Final result: total disappearance of the marginal tumor and induration. The upper lid remained swollen and vascular and partly attached to the lower lid and the bulbar mucosa. There was no change in the conjunctiva.

Case 3.—A granulating tumor situated in the region of the lachrymal sack. Two applications of radium, a fortnight apart, resulted in the entire disappearance of the tumor.

Case 4.—A papilloma involving to an equal extent the margin of the upper lid and marginal mucosa. Previous unsuccessful treatment with caustics. A single application of radium sufficed to effect a complete disappearance of the tumor. No recurrence fifteen months later.

He thinks these cases tend to support the contention that only benign or slightly malignant cancers are amenable to treatment by any form of radiation. He further says that operation (excision) is the method of choice for malignant tumors.

Disturbances of Hearing During Fever.

Rugani (Archiv. Ital. di Otolgie) speaks of the disturbances of hearing caused by fever process, but regardless of the disease which causes the fever, excluding deep-seated middle-ear conditions and with normal tympanic membrane. Consideration was first given to patients with 100.4 deg. to 103.1 deg. F. and with normal sensorium. The affections were in part severe, ileotyphus, coli bacillus. Puerperal infection, lung tuberculosis and articular rheumatism; partly mild as in bronchial catarrh, angina and gingivitis. In the cases examined the fever had existed in some for a long time, others for a short time, and in some cases simply a passing attack. The examinations of the hearing were usually made during the fever attack, sometimes during convalescence or after.

Two Cases of Post-Diphtheritic Paralysis.

Musson (Montreal Medical Journal) describes two cases. The first case occurred in a man aged 27 years, treated in the ordinary way and with antitoxin. Paralysis of the palate occurred while still under treatment for the disease, but it passed away before leaving the hospital, one month after the onset of the diphtheria. It recurred almost immediately afterwards in a typical fashion, extending from the throat to the arms and limbs. Sensation to touch, pain and heat were diminished. The right side was affected more than the left. Still, throughout, a certain power over the limbs was retained. Five months elapsed before recovery became complete.

The second case was not quite so severe as the first. It occurred in a man aged thirty, and was followed by equally good results. The treatment of both was chiefly of an electrical character.

Vesicular Molar Pregnancy taken for Ovarian Cyst.

Schroder (British Medical Journal) mentions the case of a woman aged forty-nine who noticed sudden enlargement of the abdomen. She had borne eight children; all the pregnancies were normal. The period seemed to be regular; it occurred a fortnight before the swelling began, and was followed within a week by slight hemorrhage. The swelling was examined two weeks after it was first noted; it was tense and movable and extended upward to the umbilicus. It could not be defined as entirely separate from the uterus, but appeared to dip into Douglas's pouch behind that organ. The cervix lay high just behind the symphysis. Malignant ovarian tumor adherent to the uterus was diagnosed. When the abdomen was opened it became clear that the tumor was a uterus enlarged up to the standard of the fifth month of pregnancy; it was abnormally soft and vascular. No fetus could be defined through its walls. Supravaginal amputation was performed. Then the cause of the error became clear; there was a distinct pouching of the uterine walls fitting into Douglas's pouch. The uterine cavity was occupied by a vesicular mole which was invading the walls in the usual manner. The right ovary was in a complete state of atrophy, the left contained a few cysts, but they had not yet been examined microscopically in order to determine if they were of corpus luteum origin.

Occult Bleeding.

Boyd, in the Scottish Medical and Surgical Journal, gives a critical review of recent work done in Germany on this subject. The occurrence of blood in the stools which is not demonstrable either macroscopically or microscopically has been termed by Boas "occult bleeding." This sign is of importance from a diagnostic point of view. Everyone is familiar with the difficulty of differentiating early gastric carcinoma, achylia gastrica, and certain nervous affections of the digestive organs. A number of writers claim that a diagnosis of early carcinoma of the stomach can be determined by demonstrating the presence of occult bleeding. The methods of demonstration is as follows: A portion of the suspected stool (2 to 3 grammes) is rubbed down in a small porcelain dish with 20 c.c. water until completely mixed. To the mixture is added one-third of its volume acetic acid and shaken up with 10 c.c. of ether. If the ether extract which floats on the surface is not clear a few drops of alcohol are added to clarify. The extract is then tested with (a) the guaiac test, (b) the aloin test. (a.) Two c.c. of the extract is taken, 10 drops of freshly prepared guaiac tincture, and 10 to 20 drops of old ozonic turpentine is added. With the presence of hæmatin an intense blue color is obtained in a few seconds, which ultimately becomes reddish-violet. Care must be taken in shaking the test tube not to bring the skin of the fingers in contact with the mixture, as the sweat of the skin gives a fallacious positive result. Positive results are said to be given by blood in a dilution of from 0.0008 to 0.00005. Difficulty in the application of the test may arise from the inefficiency of the turpentine oil. Hartman advises standing the oil in open dishes for eight weeks, by the end of which time it has become sufficiently ozonised. Kuttner advises the use of peroxide of hydrogen instead of the turpentine oil. (b.) The alion test is applied in the same way, fresh tincture of aloes being used instead of the guaiac tincture. The test gives a positive reaction in the presence of hæmatin by striking a clear red color, quickly passing into a cherry red. This color appears rapidly, and a positive reaction must not be assumed if the color only becomes rose-red after standing some hours. A very necessary precaution is the use of freshly-prepared alion tincture each time, as old tincture will strike a red color without the presence of hæmatin. A reliable demonstration of occult bleeding cannot be obtained unless flesh can be excluded from the diet. The patient must, therefore, be kept on a flesh free diet for at least three days before making the observation. Boas and Kochman report examinations on 257 cases of different stomach and bowel affections. These results divide themselves into three groups. In the first group, which includes cases of gastritis, anacida and subacida, hypersecretion, atonic dilatation, and the

neuroses, blood was never found in the stools. In the second group, comprising cases of simple ulcer, gastric or duodenal, and ulcer stenosis, blood was occasionally found. In the third group, which consists of cases of gastric carcinoma, blood is always found. Hartman found blood in all his cases of simple ulcer. He draws attention to the importance of this observation in the explanation of cases of chronic gastric pain with anæmia, the probable cause of the anæmia being found in occult hæmorrhage from a chronic ulcer. Hartman also maintains that the systematic examination of the stools in this way will enable one to establish the diagnosis between hysterical or neurasthenic gastralgia with hyperchlorhydria and gastric ulcer. In carcinoma cases Hartman gives results in 17 cases of gastric carcinoma, 3 cases of carcinoma of the gall-bladder, with perforation into the intestine. In these cases the stool examinations were positive in all except three, and in the negative cases the post-mortem examination proved the patients to be suffering from scirrhus carcinoma of the pylorus without any ulceration. In one of his cases of gastric carcinoma there was no gastric motor stasis, no lactic acid; free hydrochloric acid was present, and no tumor could be detected by palpation under chloroform. The blood test was constantly positive, and operation revealed the presence of gastric carcinoma. A similar result was obtained in a case of carcinoma of the colon. The author concludes that when with diminished hydrochloric acid secretion and good gastric motility the systematic examination of the stools gives a uniform positive result; then, though other clinical symptoms are absent, the diagnosis of carcinoma is established and a benign affection is excluded. Schloss has confirmed the conclusions of Boas, Kochman, and Hartman. From these observations one must conclude that in the demonstration of the presence or absence of occult bleeding we have a very valuable clinical sign—valuable as an aid in the differentiation of achylia or gastric anacida from early carcinoma. The sign will also be of great value if Hartman's observations are correct in the diagnosis of hyperchlorhydria and gastric ulcer. The test can be applied to vomited matter, but not to stomach contents obtained by the stomach tube, nor can certain conclusions be reached from an examination of the fæces if the stomach tube has been recently used. The gastric mucosa is so friable that even a soft stomach tube may cause bleeding. After the use of the tube, therefore, accidental hæmorrhage may give rise to error.

The Feeding of Atrophic Nurslings.

Variot (British Journal of Children's Diseases) says that atrophic nurslings are children whose growth has been retarded by gastro-intestinal disorders. He states that when in 1892 the Belleville Dispensary was established in Paris we soon recognized that the great majority of our infant population is composed of feeding-bottle atrophies, reared on bad milk, and otherwise improperly fed. It is necessary to distingussh between the children whose growth has been temporarily arrested, but who can, under a sterilized milk diet, be set on the path to a healthy life, and the class of pronounced atrophies of the Parrot type, which are almost always incurable. For this reason we determined to restore in France the notion of infantile atrophy, which is admitted abroad. The chief function of a child during the first year of life is to grow; at the end of the first 12 months of life the child should be three times its weight at birth. Although both in France and abroad attention has been given to the proper nourishment for healthy infants, there has been considerable of the class of atrophics who frequent our "gouttes de lait" (dispensary for infants). Since the rearing of the latter is more difficult than that of healthy infants, it demands the greater care. Diet ought to be studied more closely, and its constituents and quantity calculated more scientifically from cases under observation. This is the work we have undertaken since we organized our milk depot at Belleville. I would first record briefly the methods of determining the amount of food required by healthy infants. Attempts have been made to calculate theoretically and mathematically the quantity of milk necessary to provide the proper number of heat units produced by the child and recorded on the calorimeter; to this is added a quantity to permit the proper gain in weight. Calculations thus made led to results of which the precision has been exaggerated, but which coincided approximately with opinions formed from direct experience. The table in use at the Belleville Dispensary is as follows: One part water two parts milk —first week, 30 grammes every two hours; second week, 45 grammes every two hours; third week, 60 grammes every two hours. One part water three parts milk—fourth week, 75 grammes every two hours; second month, 75 to 100 grammes every two and a half hours. Pure milk—third month, 120 grammes every three hours; fourth, fifth and sixth month, 135 to 160 grammes every three hours; seventh to twelfth month, 180 to 200 grammes every three hours. This scale has been calculated in accordance with the variations of the normal capacity of the

stomach of exclusively breast-fed infants. The children were weighed both before and after each feeding. The aggregate weight of the milk taken in 24 hours was thus found, and this quantity was divided by the number of times the child was given suck, the result being the capacity of the stomach. It has been suggested that 10 per cent. of the body weight should be given as the daily allowance. That quantity is probably insufficient. Atrophic infants certainly require more. Prematurely-born children may require 20 per cent. or more. But before a special study of feeding in special circumstances we must consider the different clinical varieties of infantile atrophy. First, there are the breast-fed atrophics, mostly due to insufficiency of the mother's milk. Atrophy in breast-fed babies results much less frequently in gastro-intestinal disorder. In this class also we find a small number of underfed children, entrusted to negligent and unnatural nurses who do not give food to their charges as often as they should. But more often atrophies are overfed. This is the type with which we are all so familiar. The trouble is due both to the bad quality and the excessive quantity of the milk, administered at irregular intervals. Another class may more properly be described as surcharged than overfed. Fearing to give them too strong milk, the mothers add twice or at least an equal quantity of water. This overloading is the great cause of vomiting. A further type is the infant of 5 to 8 months who has been fed with all sorts of improper diets, such as soup, potatoes, milk puddings, etc. With regard to athrepsics, a few only may be saved with difficulty, especially if they have passed six or eight months (the term "athrepsia" includes those infants whose weight is less than 50 per cent. of the normal). In severe forms of infantile atrophy the nurse is often to blame as well as the bottle. The ignorance, carelessness and laziness of nurses is a chief cause of mortality amongst artificially-fed children. I have found in Breton villages that the mortality among infants raised on the bottle by their mothers is 12 to 15 per cent., whilst according to the accoucheurs the death-rate among bottle-fed infants sent out to nurse reached and passed 30 per cent. during the first year We will now consider what rules should govern the diet of these children. Milk should be given to the exclusion of every other food for the first eight months of life. Human milk is the best, of course, but can only be given by means of a wetnurse. Wetnurses are too expensive for poor people, besides the industry is fundamentally immoral and should not be encouraged. From an experience of ten years amongst thousands of children, I am convinced that sterilized milk of good quality, carefully prepared and employed methodically, suffices in the great majority of cases to cure atrophics. I have not been satisfied with asses' milk in these cases. Asses' milk is a thin milk resembling human milk, but is much poorer in fat. Perhaps this poverty in fat fails to meet the requirements of the atrophic, who usually needs a good deal of nourishment. The price of asses' milk is too high (5 or 6 francs a litre in Paris) for the poor. The same remark applies to modified milk, peptonized milk, etc. I prefer milk sterilized commercially at 108 deg. C, brought from Normandy to Paris in half-litre bottles. Others have reported similar success with sterilized milk. Their weight may show no increase for weeks or even months after the adoption of the sterilized milk treatment; but if they receive good milk from the mother or a good nurse their return to a natural progressive weight increase is only a question of time. As to the quantity of milk to be given, that is a much more difficult subject than in healthy infants. Seven years ago I had the idea that the quantity might be determined by the weight of the child; that I soon discovered to be an error. I have, therefore, had to renounce systematic graduation in the artificial feeding of those infants. We must proceed tentatively, determining the tolerance of the stomach and intestines, and judging of the progress of the child by systematic weighing. The food should not produce gastro-intestinal irritation. During the initial period of weight stagnation the tolerance of the digestive organs for the milk is the sole guide, because the weight remains stationary. Later, when the process of assimilation has been re established the size of the meal may be increased more or less rapidly, according as the weekly gain in weight is small or great.

On Convulsions in Early Infancy.

Thompson, in The London Practitioner, divides this condition into the predisposing and exciting causes as follows: Of predisposing causes four may be mentioned: (1) There is, of course, the age of the patient—the state of development of the infant's nervous system, predisposing him to all kinds of convulsive attacks. (2) Certain general diseases may predispose—especially rickets. This is by far the most important of the predisposing causes, as it is the only one which is amenable to immediate treatment. The tendency to convulsions, in rickety children, rapidly disappears under antirachitic treatment, even although obvious sources of peripheral irritation persist. (3) A very important predisposing element

is inherited nervousness of constitution. Some children are hereditarily so nervous that any rise of temperature or any peripheral irritation, however slight, may bring on a fit. This state of nervousness may be found in children who seem otherwise strong; and sometimes many members of a family have it to a marked extent. (4) Another predisposing cause is a permanently damaged state of the brain from any cause—quite apart from any recent changes in it. An area of cortical sclerosis, for example, even when it does not affect the mental functions, is very often accompanied by a tendency to convulsions. In the same way, nearly all the developmental and other lesions, which produce imbecility, predispose also to convulsions on slight provocation. The recurrence of convulsions in very young children should, therefore, always lead to a careful investigation of the child's mental state. Possible exciting causes are very numerous indeed. The most important of them may be classed in one or other of three groups: (1) They may result from a number of intracranial causes (diseases, injuries or circulatory changes). Such, for example, are, concussion, hæmorrhage, tumor, abscess, and meningitis of all kinds; also cerebral congestion, which we sometimes get in whooping cough, and in some cases of congenital heart disease, and the cerebral anæmia, which accompanies severe diarrhœa and loss of blood. (2) General acute morbid conditions, again, are often responsible for a convulsive attack. A sudden rise of temperature, such as would produce a rigor in an adult, will often in an infant cause a convulsion. This is seen in pneumonia and in various of the exanthemata, especially in scarlet fever. In uræmia, fits are not uncommon, and a large number of poisons, both metallic and vegetable, often occasion them. (3) Peripheral nervous irritation is certainly a common exciting cause of fits, and one which is often present even when its site of origin is obscure. Undigested matters in the bowel or stomach, painful lesions connected with dentition, otitis, or phimosis, may readily start a convulsion in rickety or neurotic infants. Generally, as mentioned above, the place of rigors is taken in young children by convulsions. It is, however, a very curious thing that acute irritation of the renal pelves frequently give rise to rigors, even in young babies. Among twelve cases of acute pyelitis from Bacillus coli in infants, that I have seen, no fewer than six suffered from rigors. Two of the cases were in children of five and seven months, respectively. In none of them have there been any ordinary convulsions.

Chorion-epithelioma and its Spontaneous Cure.

Fleischmann (British Gynecological Journal) published a case of chorion epithelioma some time ago, now reports that the woman, who in the meantime has had a normal pregnancy, two and three-quarter years after the scraping out of the uterus, remains quite well. The writer says that the cures in the cases hitherto reported can be attributed to the complete removal of all morbid matter by the curette, and points out that no histological distinction has up to the present been established between the cases that take a benignant course and those that are malignant.

A Case of Quadruplets.

Roberts (The Australasian Medical Gazette) describes the following unusual case:

Mrs. G., age thirty-two, of French extraction, married twelve years, with a family history of twins on her maternal side, gave a personal history of six previous confinements, resulting in delivery of ten children in following sequence: Twins, triplets, a single child, then twins again and two children, all of whom are living except the triplets, which were premature seven months. In addition, eighteen months ago she had a placenta prævia with decomposing fœtus at five months, which necessitated removal piecemeal under anæsthesia. On this occasion the abdomen was enormously distended. Twins (at least) were diagnosed, as two or more fœtal heads could be felt. No distinct fœtal heart sounds could be made out, owing to loud uterine souffle.

Labor occurred at the eighth month. After very slight pains the head of the first child was found on the perinæum, and it—a boy—was born within an hour. The second child also presented by the head, which was, however, impacted at the brim, with the feet of the third child. The feet were pushed up under slight anæsthesia, and the second child—a boy—was easily delivered by forceps. The third—another boy—was seized by the feet and delivered five minutes later, but was stillborn and resisted all efforts at resuscitation. The fourth child—a girl—presented by the breech, and was born a quarter of an hour after the third.

As there was considerable hæmorrhage, and simple expression of the huge flabby uterus was unsuccessful in expelling the secundines, a hand was introduced. There were four distinct and separate placentæ about five to six inches square, and four separate bags of membranes, although the second and third placenta were found united after removal by a band of membrane some four or more inches wide.

The mother and her three children, weighing each about 5 to 6 lbs., are now thriving.

Pathology and Therapy of Yaws.

Castellani (Journal of Tropical Medicine) says that in spite of analogies, both in lesions and treatment, the disease known also as frambœsia, parangi, pian, etc., is not syphilis. The identity of the two diseases was supported by Jonathan Hutchinson and others, but the clinical symptoms, the geographical distribution, and the histopathology of frambœsia tropica show many points of difference from syphilis. The author's investigations showed that the early lesions contained a spirillum, for which he proposed the name of Spirochæta pertenius, or pallidula. This spirochæta does not, however, prove that the disease is identical with syphilis. "The leprosy bacillus, the tubercle bacillus, and many other acid fast bacilli are morphologically identical; however, leprosy is not tuberculosis." The author says that the yaws spirochæta will have to be regarded as biologically different from the spirochæta of syphilis. The antisyphilitic treatment by large doses of potassium iodide he found to be likewise very efficient in yaws; and much more effective than mercury. Some cases may get well spontaneously; but comparison with the results of the potassium iodide administration shows the great advantage of this treatment. In direct contrast to the above, expressed opinion as to the nonidentity of the two diseases is that of Long, the principal medical officer of Basutoland, Africa, whose annual medical report appears in the same issue of the Journal of Tropical Medicine. He says: "The identity of syphilis and so called yaws has been fully discussed in a previous report. As some observers still regard yaws as a separate disease, I would again point out that the experience of medical officers in this country proves that every lesion delineated in fasciculus xiv of the New Sydenham Society's Atlas finds its counterpart in syphilitic natives in Basutoland." The treatment of syphilis is the treatment of yaws.

Direct Methods of Examining the Upper Air-Passages.

Meyer (Berliner Klinische Wochenschritt) examines the larynx, trachea, and bronchi by autoscopy and bronchoscopy. For the larynx the writer uses various special tongue depressors, which have means of electric illumination; for bronchoscopy an elaborate set of various tubular speculæ, to be placed in situ either through the larynx or a tracheotomy wound. He has performed over 100 endo-laryngeal operations by the direct method on children, believes it is the best method of dealing with young patients. The author believes that at times the laryngeal mirror will be the most useful Trial must be made in each case to find the most suitable plan. The doctor gives a number of cases in which bronchoscopy was successfully used for diagnosis and for operation; also in cases of struma, where suspected intrathoracic growths were detected by this means. Stenosis was greatly relieved in a case of dyspnœa due to pressure by dilatation with a special instrument. The writer does not go as far as Killian, who proposes tamponade of the lungs in hæmoptysis, but believes some use as an aid to pulmonary surgery may be made of this method.

An Improved Method of Treatment in Glaucoma.

K. Scott (Caledonian Medical Journal) records a modification of the operation of iridectomy, which he thinks will prove of service in the treatment of glaucoma. An iridectomy as usually performed for glaucoma is the excision of a large piece of iris from the pupillary to the attacked margin. This is liable to open freely the filtration angle, but at the same time, by breaking the continuity of the sphincter of the iris, prevents any reflex contraction. Scott thinks that we may be able to compass a free opening of the filtration angle, and at the same time spare the sphincter; thus, "By making a full incision in the iris, which removes the outer portion only of a sector of tissue, up to the ciliary insertion of the radiating fibres of the muscle, and leaves the fibres composing the sphincter of the pupil aperature quite intact; therefore the full action of the latter remains unimpaired for all practical purposes."

Influence of Nasal Obstruction.

Parsons (The London Medical Lancet) discusses the varying views relating to the influence of nasal obstruction upon the form of the face. What is known as adenoid facies sometimes occur without the presence of adenoids, and occasionally adenoids are present without the presence of facies. Obstruction of respiration by adenoids leads to a flattening and widening of the bridge of the nose. This may be associated with anterior obstruction, in which case the removal of the adenoids alone will not afford relief. Crowley's 200 cases showed improvement only in one-eighth of the cases, while eight showed no gain whatever. Among the reasons given for the continuance of symptoms was hypertrophic rhinitis in ten cases. Every case which presents deformity of the upper jaw should suggest the presence of anterior obstruction. If there is obstruction from adenoids alone with adenoid facies, but with no deformity of the upper jaw the surgeon may be confident of immediate beneficial results from the operation. Mouth-

breathing after operation from adenoids is usually the result of constant or intermittent anterior nasal obstruction.

How Can We Increase Lactation?

Rommel (Muenchen. med. Woch.) records a most encouraging report on the efforts to increase the efficiency of wet nurses at his institution in Munich. Mothers whose daily milk capacity on entering the hospital was only one to two hundred grammes succeeded in increasing the amount within a very short time to several litres a day. Nurses who had almost completely lost their milk later recovered the function of their breast.

In the nutrition of the nurses a varying diet should be instituted, consisting mostly of food containing albumen and sugar. Laktagol and other similar preparations to increase the quantity of milk gave only doubtful results. On the other hand massage proved a most effective agency for increasing lactation.

In the technique of infant feeding it is important to regulate the milk of the mother in accordance with the demands of the child. This is often very difficult in feeble children.

What Constitutes Normal Puerperium?

Tweedy (British Medical Journal) mentions the high range of normal temperature and the pulse throughout the puerperium, and he shows the fallacy of basing a judgment upon the mere mortality-rate. The statistics of the Rotunda Hospital show that there were long periods in the eighteenth century in which the death-rate was quite as low as that under modern methods. When the comparison is made in the morbidity the difference is enormously in favor of modern methods. Of 99 case records studied for the year 1879 only about ten patients were free from any disturbance during the puerperium. The arbitrary rule of regarding all patients as normal who have a temperature of 100.4 degrees or less, and all above that as having an abnormal puerperium, is an unsatisfactory indication of the well-being of the lying-in woman. Were a temperature of 100.4 degrees to be continued for any length of time there would certainly be an abnormal condition. Such an arbitrary rule regarding the temperature takes no account of sudden and transitory rises of temperature which may easily extend beyond this limit without adversely affecting the patient and without being remotely allied to septic absorption. Such a rule also takes no account of the pulse, which is one of the best guides in determining the presence of puerperal infection and involvement of the peritoneum.

Monster of Seventh Months Removed by Hysterectomy.

MacNaughton-Jones (Journal of Obst. and Gyn. of British Empire) gives the following interesting report of a case. The woman, forty-three years of age, became insane from the time she knew she was pregnant. Her father and uncle were both insane. On account of this condition and also because there was a probability of the uterus being myomatous, the author decided to interfere with pregnancy. Dilatation with Bossi's instrument seemed inadvisable, so that a hysterectomy was preferred. The pregnancy had advanced to the seventh month.

On opening the uterus a small intrauterine myomatous tumor was found near the fundus. The fœtus was deformed, being a feminine pseudohermaphrodite. This is of special interest owing to the history of mental derangement in the family and the mother. He even goes so far as to give this factor as a probable (?) cause of the malformation.

After operation the mother's insanity greatly improved.

Medical Treatment of Appendicitis.

Moosbrugger (Munchener medicinische Wochenschrift) has attained excellent results in both the acute and chronic forms of appendicitis by collargolum. In mild cases where there have been colicky pains and irregularity of the bowels, tenderness on pressure, but without abdominal distention, he applies flax-seed poultices and gives a tablespoonful of a solution of 15 grains of collargolum in six ounces of water. The dose is repeated every half-hour to an hour. In more advanced cases the dose of the remedy is doubled, and unguentum Crede is rubbed into the abdomen. In early cases there is prompt improvement in the symptoms, but in those farther advanced persistence in the treatment is required for a week. Many cases that are apparently hopeless are relieved by the energetic employment of the drug. In his series of seventy cases only two ended fatally, and in both diffuse peritonitis had set in before treatment was instituted. The author says that the result of treatment justifies a favorable prognosis in cases which have not progressed to general involvement of the peritoneum, and in which general profound infection has not taken place. If the disease has just begun the collargolum treatment is quite as effectual as appendectomy. Even in cases of abscess there is no necessity of urging early operation, as under this treatment infection becomes walled off, and there is less liability of infecting the general peritoneum when the operation is undertaken.

The Dietetics of Diseases of the Stomach.

Hutchinson (The London Practitioner) mentions the fact that when the dilatation is slight and of the atonic type, without true pyloric obstruction, the meals should be small, dry, and mainly of animal constituents. The atonic stomach deals only with difficulty with a mixture of liquids and solids, consequently the patient must not drink with his meals. The necessary amount of liquid may be made up by taking sips of hot water between times. All saccharine articles should be avoided, and the starchy constituents restricted to rusks, torrefied toast, or pulled bread; thus the production of flatulence is reduced to a minimum.

Should there be actual obstruction at the pylorus, with stagnation of the contents, one must begin by cleansing the stomach by thorough lavage, which may be repeated daily, and the diet should consist largely of milk, peptonized if necessary, and administered frequently and in small amounts. The milk may sometimes be enriched by one of the concentrated proteid foods, and a limited quantity of starchy food in the form of biscuits or rusks may usually be allowed with safety.

Patients with pyloric obstruction and copious vomiting, or in whom lavage is being carried out, are very apt to suffer from a deficient supply of fluid to the tissues, and much of the cachexia and wasting, which they exhibit, is due to this cause. In such cases the supply of fluid should be supplemented by the administration of water by the bowel, a pint of normal saline being injected night and morning. If this be omitted, the excretion of waste products by the kidneys is apt to become interfered with and uræmic symptoms may supervene.

Treatment of Ringworm in Schools.

Walsh (Brit. Jour. Child. Dis.) describes a method by which this can be practically accomplished without removing the child from school. The scalp is shaved, rubbed with turpentine, washed with soap and water, and dressed thoroughly with a germicide such as a weak solution of formaldehyde or sulphurous acid. It is then exposed to the X-Ray for ten minutes and finally painted with several coats of a ten per cent. solution of salicylic acid in flexible collodion. A mild irritant remedy may be substituted for the X-Ray. The collodion dressing is reinforced with cotton or strips of adhesive plaster, if desired, and a fresh coat of collodion is applied in a few days if there is a tendency to cracking. After a week or ten days the collodion cap is raised from the head by the growing hair and may be gently stripped off. This results in complete depilation. The process may be repeated as often as necessary. By this othe children are protected from infection by isolation of the diseased scalp; cure is hastened by depilation. which is aided by the X-Ray or an irritant, and the affected child may continue in school.

The Treatment of Gonorrheal Ophthalmia by the Organic Salts of Silver.

Darier (The London Medical Lancet) says that the classic treatment of gonorrheal ophthalmia consists in cauterizing the conjunctiva with nitrate of silver. This procedure no doubt rapidly dries up the suppuration, but it also destroys the conjunctival epithelium and increases induration in tissues which are already edematous. Sometimes it is attempted to reduce the infiltrations of the tissues by means of iced compresses, with results which are more harmful than useful. The real object of the treatment is to reduce the induration of the tissues. Every morning and evening during a space of one or two hours, at an interval of from twenty to thirty minutes, from three to four drops of a 25 per cent. solution of argyrol is instilled into the eye, the eyelids being held so as to make a kind of bath for the conjunctiva and the fluid being retained as long as possible. This argyrol bath is in no way painful, but relieves the patient in a very real fashion. Besides the instillation of a 25-per-cent. solution, others of a 10-per cent. solution are used day and night every half hour. At the end of fifteen days the secretion has most likely ceased, but the conjunctiva is still rough. In from five to six weeks, however, everything is normal. After eight years' trial M. Darier has come to the conclusion that although the organic salts of silver apparently have less bactericidal power than the nitrate, yet they are surer in action owing to their superior powers of penetration and their being harmless to the tissues. They may be applied almost continuously, and in strengths of even 28 or 50 per cent.

The Results of Operation for Recurrent Uterine Cancer.

Rosthorn (British Gynecological Journal) stated at the recent meeting of the German Gynecological Society that to obtain better results it would be important to study the various kinds of primary tumor, which differ very widely. He showed a carcinoma of the posterior lip of the portio in quite an early stage, yet the corpus uteri was studded with cancerous nodules and all the glands involved; on the other hand, he has operated, by the help of Schuchardt's incision, on a case of far-advanced cervical carcinoma in which no glands were involved, which died some considerable time afterward from

peritoneal tuberculosis. Weight must be attached to the form and extension of the disease, and the recurrences themselves should be studied in their early stages. There is a great difference between recurrences in the connective tissue and in the lymphatic glands. Operation on the former is not invariably difficult, at any rate is not hopeless; lymphatic gland recurrences, on the other hand, are serious, and moreover generally fatal. The abdominal method should generally be chosen for operating on recurrent cancer. Most of such recurrences are local, and the extirpated glands have been free from disease. The author had three cases of local recurrence which remained well. The topography of the growth and not its size will determine the technique to be adopted.

Torsion of the Pedicle of an Ovarian Dermoid Cyst.

Lepage (British Gynecological Journal) reports a case of torsion of the pedicle of a dermoid cyst of the left ovary in a woman three and a half months pregnant, to show the importance of exact and systematic examination of pregnant women, even in the earlier months of gestation. The diagnosis and operative interference would not have been so long delayed if the anamnesis and previous examination by the physician in attendance had not led to mistakes. The cyst, however, was removed, and in spite of peritonitis having begun the result of the operation was good and pregnancy continued to term.

Nocturnal Enuresis.

Thursfield (Clinical Journal) states that there is scarcely a drug in the British Pharmacopœia which has not been praised as valuable in the treatment of enuresis, but there is none which does not, from time to time, fail utterly. At one time he believed that he had found a drug in urotropin which was uniformly valuable in this disease, and in a limited number of instances a moderate dose of this drug does effect an immediate cure. The best results are obtained in those cases where the condition follows an acute infectious fever such as typhoid. It is necessary to give the urotropin well diluted, otherwise the patient may suffer from renal pain and hematuria; 10 grains in half an ounce of water to be further diluted with a wineglassful of water three times a day is the best method of using it. He tried it three years ago on a succession of 30 cases, with good results on 9 children. It is, therefore, a drug which it is well to remember when progress is unsatisfactory.

In the cases where urine is strongly acid he gives potassium citrate in doses of 15 grains to a drachm three times a day. But the drug which appears to be most useful is belladonna. We can give it in various forms, as liquor atropinæ, as the tincture, or as the extract. He generally uses the tincture, but not from any strong conviction of its superiority. Whatever form we employ, if we are to use it with success we must give it in large doses, carrying it to the extent of obtaining evidence of its action, and it must be used over a long period. The writer begins with 10 minims of the tincture three times a day, and then raises the dose rapidly to 30 or 40 minims, or even to a drachm. As the dose is increased the frequency of the enuresis will diminish, and after a period varying from two weeks to two or three months it will cease. Of course it should be combined with the other measures which have been discussed. At this point it is wise to continue the drug for another month, and then gradually diminish the dose, so that by the time we have cured the enuresis we are about half-way through the treatment of the case. The danger of poisoning the patient is very slight. The visual accommodation will be troubled in the majority of cases, and there will be a dryness of the throat and occasionally a smarting sensation in the pharynx and mouth, but all these are very slight troubles compared with the relief from the enuresis. If the accommodation is paralyzed, it will be necessary to keep the child from school for a week or so. But, as a rule, the author finds that the loss of accommodation passes off fairly quickly and that the patients tolerate a large dose extremely well. The author has used other drugs, but has never found any so generally satisfactory as tincture of belladonna. Lycopodium, rhus aromatica, ergot, and antipyrin have all been used. The author mentions the drugs which really have attained some measure of success.

In cases where belladonna fails to afford any relief he has not found any drug which will effect improvement. With the dose of belladonna in excitable children he generally gives a small dose of potassium bromide at bedtime, and to anemic or ill nourished children he gives iron in some form, and a small dose of arsenic, strychnia, or nux vomica, which are useful as general tonics. When all these measures fail, electricity is occasionally tried.

Syphilitic Sniffles in Infants.

Laurens (La Syphilis) condemns the use of bichloride and other forms of irritating antiseptics in the treatment of sniffles in new-born syphilitics, for fear of inducing an infection of the Eustachian tube and spasm of the glottis. The use of syringes, as well as all forms of irritating instruments,

is contraindicated. The best treatment consists of the instillation by means of a pipette of a few drops of hydrogen peroxide, which removes the crusts and quickly cleanses each nostril, followed by the application of a little oil or vaseline. A few drops of adrenalin, immediately prior to nursing, facilitates this procedure, if the mucous membranes are so swollen as to interfere with proper breathing.

Habit Spasm.

Still (The London Lancet) defines habit spasm of children as oft repeated and seemingly purposeless movements which most commonly affect the face and head, and which are for varying periods persistent in kind, whether the movement be a twitch of one muscle, or a more complicated action of several muscles. A remarkable feature is the diminution or cessation in many cases as long as the child is conscious of being under observation. Another manifestation is what has been called "psychical tic"—utterance of foul language without any reason, delusions as to uncleanliness of the hands, etc. Habit spasm is only slightly more frequent in boys than in girls. The one fact which stands out preeminently in the history is nervous instability; rheumatism; local irritation—e. g., dentition, caries of the teeth, conjunctivitis, astigmatism, etc., mental strain and mental shock play a large part. Compulsory education is responsible for many cases of habit spasm. Mental exhaustion aggravates it if it does not start it. Habit spasm is sometimes mistaken for chorea; the latter shows movements varying quite irregularly from minute to minute. The most effectual treatment is a change of scene to the seashore or the country. School should be forbidden, and no lessons allowed for a time. All sources of local irritation should be sought for and removed. As regards drugs the author has found a mixture of arsenic and bromide most useful. Ergot occasionally has a beneficial effect.

A Method of Guarding the Perineum in Labor.

Caie (British Medical Journal) writes concerning the importance of guarding the perineum during the second stage of labor, and then gives a short outline of a method which he has employed in a large number of cases with very satisfactory results.

When the fetal head is moderately distending the perineum, the latter and the parts adjacent are thoroughly dried with a hot sterilized towel; all moisture must be wiped off. At the moment when the tension on the perineum is approaching its maximum—this can be determined easily with a little experience—the left hand of the accoucher is employed in pressing slightly upon the vertex to prevent any premature or sudden expulsion of the head; there is no necessity for passing the arm between the thighs of the mother. The right hand then grasps the perineum, supporting it in the direct method by pressure thereon of the concavity between the thumb and forefinger of the right hand, interposing between it and the perineum a hot sterilized towel—the small rough, sanitary towelettes are excellent for the purpose—in such a way that the edge of the concavity between the thumb and the index finger, the edge of the towel, and the lip of the perineum are just in line with each other, a double fold of the towel to fit into the apex of the cavity having previously been made, to supply the deficiency alluded to at that point. Firm pressure is then exerted at every pain, through the bitemporal diameter of the fetal head, if there appears to be any undue stretching or tendency to laceration. No attempt is made to push the head forward until the occiput ceases to engage behind the pubic arch. By these maneuvers three purposes are served:

1. By firm pressure through the bitemporal diameter premature extension of the head is prevented, without retarding its progress.

2. By means of the drying of the parts and the hot towel a much firmer grip, and consequently much greater support, of the perineum can be obtained than could possibly be produced by the bare hand on a surface which is usually very slippery.

3. Uniform pressure is obtained on all parts of the perineum, and the part where there is most stretching receives its due measure of support.

On the head being delivered, and when restitution has taken place, the shoulders are lying in the anterior posterior diameter of the outlet, and their delivery again endangers the perineum to a much greater extent, the author thinks, than is usually supposed, chiefly due to the prevailing practice, as recommended in text books, of allowing the posterior shoulder to be born first. If, now, after the head is born we exercise gentle traction backward, the next pain will usually cause the anterior shoulder to free itself from its position behind the pubic arch, while the perineum lies over the posterior shoulder and is subjected to only a moderate degree of tension, and if the outlet is narrow the anterior arm can usually be extracted with very little difficulty after the anterior shoulder is born, this substituting much smaller diameter of the child. If we allow the posterior shoulder to be born first, the anterior shoulder remains firmly fixed behind the pubic arch, while the pos

terior shoulder sweeps over the perineum and stretches it again to its utmost limit. No "guarding" carried out at this point, because if any pressure backward on the shoulders be exerted, the progress of the child is seriously retarded.

He puts forward this brief outline of his modified method with a considerable amount of diffidence, knowing that it is at direct variance with some of the text-book canons of the second stage of labor; but since he has employed it in about 400 consecutive cases of labor he has found it singularly effectual.

Meningitis in Children.

Baumann (The British Journal of Children's Diseases) says that a number of diseases of childhood tend to assume a type simulating meningitis, and the difficulties of accurate differential diagnosis are often great and sometimes insurmountable. The nervous system of the child is very unstable and is readily disarranged by comparatively trivial ailments.

He classifies meningitis in children into three forms:

(1) Tubercular meningitis, which is usually secondary to tubercular focus in some other part of the body. It runs its course in about three weeks and the symptoms vary with the stage of the disease. One or two characteristic symptoms may be absent and the disease run an atypical course which obscures the diagnosis.

(2) Posterior basic meningitis, which is the result of the invasion of the cerebrospinal membranes by the diplococcus intracellularus meningitides and may occur sporadically or epidemically.

Vomiting or convulsions and opisthotonos with rigidity of the limbs are the characteristic features of the disease. The spasms are more apt to be clonic in tubercular meningitis. The pulse is generally regular. The child lies with its eyes staring in marked contrast with the tightly clenched lips of photophobia in tubercular meningitis.

(3) Suppurative meningitis is generally a secondary infection in which the convexity of the brain is first attacked. The onset is less definite and the symptoms are frequently masked by those of the condition which it complicates. Head retraction is slight and may be entirely absent, and ocular changes are uncommon. The disease runs its course in a few days, terminating in death. The histories of nine cases in the Great Ormond Street Hospital for Sick Children, which were wrongly diagnosed as meningitis are given, in which the cerebral symptoms simulated that disease. The following were the correct diagnoses of these cases: typhoid fever, lobar pneumonia, broncho-pneumonia, influenza, mastoid disease, middle ear disease, sarcoma of brain, renal disease and gastro-intestinal disturbance. A case was admitted to the hospital for meningitis in which all the symptoms abruptly subsided after the passage of a large round worm.

Abscess of the brain, acute polioencephalitis, retropharyngeal abscess, etc., have all been mistaken for meningitis. Cases occur having every symptom of cerebral irritation in which a diagnosis of meningitis is given. Then, for some unknown reason the temperature falls and the child recovers completely. These cases often remain unexplained and are catalogued in hospital records as "pseudo-meningitis." The cases reported by the author were only eventually correctly diagnosed after a longer or shorter period under constant and trained observation in the hospital. The difficulties are much greater to the general practitioner who sees his cases only at intervals and often has to rely upon the statement of unskilled observers.

The points emphasized in the history are the existence of some acute infectious disease, such as influenza, among the household, the presence of tuberculosis in one of the parents, and the history of severe headaches, which accompanies and exists during somnolence. The author attaches little importance to Kernig's sign, tache cerebrale, head retraction, inequality of pupils and the examination of the blood. The more important symptoms are the condition of the pulse, examination of the eyes and ears, while the lumbar punctures should be carried out as a matter of routine. Cloudiness or opacity of the fluid signifies an inflammatory process, except in tuberculous meningitis, where it is clear. The bacteriological examination is of the utmost importance.

There is no single symptom which will enable us to differentiate a case of meningitis from another case with cerebral symptoms. A careful consideration of the symptoms and history with the information obtained by the physical examination should be made in each case. Meningitis should definitely be assumed only when the symptoms are not alone initial, but last till death.

Portal Pyemia and Pylephlebitis.

Brown (British Medical Journal) says that a collection of pus within the portal zone is the principal cause of pyemia. Ulceration of the alimentary tract is only important as being a frequent precursor of such a collection.

Signs of portal obstruction are the exception in suppurative pylephlebitis.

There are no signs by which we can distinguish with certainty cases of portal pyemia with suppurative pylephlebitis from

those in which the vein is not involved.

In "adhesive pylephlebitis" the essential feature is the occlusion of the vein, and this may be produced by a variety of causes, among which sepsis is not an infrequent one.

Therefore, if our terminology is to accord with pathological conditions so far as they can be determined during life, we ought to speak of two conditions, portal pyemia and portal occlusion, remembering that we may meet with cases of portal pyemia with occlusion.

A New Reaction to Demonstrate Acetone with some Remarks on Acetonuria.

Frammer (Ber. Klin. Woch.) states that there are at present several reactions for the demonstration of acetone, but none of them are in general use. He has demonstrated and claims to have shown conclusively that the one here described is reliable. The one thing that especially recommends it, is the ease with which it can be carried out. The writer suggests the use of 10cc. urine to which is added 1cc. K. O. H. in a re-agent glass; to this at once add 10-12 Mg. salicylic aldehyde (salicylic acid 1, alcohol 10) and heat to 70 C. In the presence of acetone at the line of junction of the two fluids a well pronounced purple-red ring will develop which is said to be seen in no other condition. The author was able to demonstrate a distinct reaction with a watery solution in which 8cc. water contained .0,000,019 g. acetone.

V. Jaksch claims acetone is a constituent of normal urine. Deichmuller was able with V. Jaksch to find .01 g. in 24 hour specimens which they claim is not abnormal. Some other investigators have been able to corroborate this finding while others have not. The older idea was that acetone was produced by the destruction of proteid material, but now it is pretty clearly shown to come from fat. By the free administration of fat it is increased; by carbohydrates decreased. It can be artificially produced in healthy people by withdrawing the carbohydrates, or by allowing the patient to fast for a short period. Antipyrine is said to produce it by its action on the blood corpuscles. Chloroform anesthesia produces it, its presence in the urine being proportional to the length and degree of the narcosis. It can be demonstrated in urine where the patient has a high fever, in high grade anemias, as carcinoma or tuberculosis. Probably the most marked degrees are found in diabetics; here according to V. Jaksch it bears no relation to the quantity of sugar. Some have claimed its presence during pregnancy to signify death of fetus. The author could not corroborate that statement, but thinks its presence, if found at all, in that condition is due to the accompanying fever. Baginsky demonstrated its presence in eclampsia.

Pathology of Bradycardia.

Hay (Brit. Med. Jour.) reports a case of this character and says that the important features of the case in question were: (1) Marked bradycardia, the pulse frequently ranging from 17 to 30 per minute. (2) Transient loss of consciousness, associated with cessation of the pulse at the wrist. (3) Auricular contractions occurring twice or thrice as frequently as the ventricular, the cause of the bradycardia being "heart block." (4) An enormous heart, the autopsy revealing no cause for the hypertrophy and dilatation. Two other marked changes were found in the heart; viz., stretching of the auricular canal and attenuation of the bond between the bases of the tricuspid valves and base of the ventricle. These two lesions interfered with the auricular contraction reaching the ventricles and thus produced the "heart block." Since there was no lesion present to account for the great hyperthrophy and dilatation, it seems that the most likely explanation would be as follows: During each ventricular diastole the auricles contract two or three times, resulting in overdistention of the ventricles, which consequently dealt with an excessive amount of blood during their systole. The strain on the ventricular walls due to the forcible pumping in of blood by the auricles would produce dilatation, and the large volume of blood dealt with would necessitate hypertrophy. It is assumed that the attacks of dizziness and fainting were due to a temporary cessation of ventricular contraction.

Mortality of Contracted Pelvis in The Past and The Present.

Baisch (Centralblatt f. Gyn.) mentions the remarkable fact that with the decrease of fœtal mortality in the treatment of contracted pelvis from 16 8 to 6.6 per cent. there has likewise been a decrease in maternal mortality from 5 per cent. to 0.1 per cent. Searching for the cause of this decrease he finds that abandonment of prophylactic version has given better results. The cause of death among the children is in the first place version on account of transverse position or prolapse of the cord; secondly, through waiting for spontaneous birth; and finally directly from the results of the high forceps. Baisch concludes:

(1) In the transverse position external version to bring down the head should be resorted to wherever possible.

(2) Expectative procedures should be shortened in prolonged labor by operative

measures, usually forceps.

(3) High forceps and prophylactic version are contraindicated where the head has not entered the pelvis.

Medical Treatment of Appendicitis.

Pauchet (Med. Press & Cir.) recommends absolute rest. The patient must lie on the back with head but slightly raised, for one or two weeks. During five, ten or fifteen days, according to the intensity of the case, the patient will be given nothing by the mouth, neither milk, water or medicine. This absolute diet is sometimes so difficult to obtain that the attendant will be obliged to allow not over a teaspoonful of water every fifteen minutes. No purgatives. A large number of patients die from perforation because calomel or some purgative mineral water is ordered.

Opium should not be given, as it paralyzes the intestine and constitutes a slow poisoning of the patient. If great suffering is complained of, an injection of morphia may be given or an enema of fifteen grains of antipyrine. Purgative enemata should be proscribed as dangerous, as an excess of pressure might determine the rupture of adhesions or the bursting of an abscess. Since the patient is totally deprived of absorption by the mouth, water and nutritive elements must be introduced into the system by the rectum and skin.

The enema which the author employs is the following: Sugar, 1 teaspoonful or 1 lump; salt, 15 grains; water, 4 ozs. To be renewed five or six times in twenty-four hours. Besides these enemas he injects into the muscles of the thigh the following solution: Sugar, 1 oz.; salt, 1 dram; water, 1 quart. From 10 to 20 ounces are injected in twenty-four hours.

Local treatment: the ice-bag if ice is obtainable, otherwise warm applications may be used.

Bier's Treatment in Gynecology.

Eversmann (Zent. f. Gyn.) advocates the use of the suction method, used by Bier, in the treatment of gynecological cases by which a congestion of the cervix is produced by exhausting the air from a glass speculum placed over the cervix uteri. The speculum should be of glass so that all the tissues treated may be seen while the vacuum is in action. A tube is attached to one side so that the air in the speculum, whose mouth is placed tightly over the cervix, may be exhausted with a small pump. The action is much like that of the breast pump. It produces a congestion of the cervix, and an extraction of the fluids contained in the uterine cavity and the tissues. The treatment is carried out for thirty minutes at a time daily or alternate days. The amount of suction may be regulated according to the condition to be treated and the tolerance of the patient. The treatment is of the greatest value in all forms of endometritis, producing a marked discharge, while some blood usually escapes from the tissues. The hyperemia and the extraction of fluids are both of value in this condition, the latter increasing the circulation and the amount of repair of the tissues. The feeling of pressure and bearing down in the uterus is relieved. Adhesions in the cul-de-sac of Douglas are absorbed under this treatment, although the author cannot account for this effect. Amenorrhea, dilatation of the os uteri and liability to abortion are also benefited.

Treatment of Syphilis by Intramuscular Injection of Mercury.

Lambkin (British Medical Journal) refers to the improvement in the management of syphilis, due, as he thinks, to the recognition of the necessity for a continous treatment over a considerable period of time. The author says that the administration of mercury in pill form or the use of inunctions two or three times a week is not nearly as effective as intramuscular injections. To the latter must be given the main credit for improvement in the management of syphilis. This method was introduced in the British army in 1888. At first it met with opposition, but it has gradually won its way into favor until it has been recognized as the best and most convenient means of carrying out the continuous treatment. The alleged dangers of intramuscular injections have been greatly exaggerated. He has employed over 60,000 injections of mercury, mostly in the metallic form, and in not one of these was there abscess or emboli. It is most important that every detail in connection with the injections should be carefully carried out. The soluble salts of mercury have been used extensively by the injection method, but they require to be treated three or four times a week, which is not only distressing to the patient but irksome to the surgeon. The advantage of the soluble salts is that their action can be better controlled than the insoluble salts. Calomel is absorbed very quickly and prompt reaction follows its injection, more so than after any other salt of mercury. Its injection is intensely painful, and it should be used only in cases in which heroic measures are necessary. The writer has made extensive experiments with the salicylate of mercury, and has found that it is not as useful as either calomel or metallic mercury. To obtain marked benefit from it it should be injected at least two or three times a week.

The most satisfactory mercurial prepara-

tion is metallic mercury rubbed up with lanolin so as to form a cream. A good formula is as follows: Mercury one-half ounce; lanolin two ounces; liquid paraffin, carbolized (two per cent), to make five ounces by volume. The finished product equals one grain of mercury to ten minims. The dose is ten minims once a week. Metallic mercury is not quite as active as calomel, but for the majority of cases it is sufficient and the injections are practically painless. In compounding the cream the mercury and lanolin ought to be rubbed thoroughly in a glass motor until every particle of the mercury disappears. This trituration is tiresome and ordinarily takes two hours. When the whole amount has been treated the carbolized liquid paraffin is added. The injections are preferably made in the gluteal region, the needle being driven straight into the muscle with one thrust. Glass syringes should be used with a platino-iridium needle, the latter not exceeding 1½ inches in length. The average dose is one minim of metallic mercury, though this will be found insufficient for some cases and too much for others. The injections should be given once a week for six weeks or two months. The frequency is then reduced to once in two weeks for the next three months. A rest from all mercurial treatment for two months should be followed by a three-months' course of fortnightly injections, to be succeeded by a two-months' repose from treatment. In this way the patient is brought to the end of the first year's treatment. After this he is kept under strict observation, and should he show any signs of relapse further courses of three-months' treatment are given, followed by the same amount of rest. The patient ought not to be lost sight of until he has been at least three months clear of all symptoms after the last course of injections.

The Fever of Late Visceral Syphilis.

Birt, (Montreal Medical Journal) points out the diagnostic difficulties presented by visceral syphilis, and reports a case in which there was enlargement of the liver with fever of an intermittent type, night sweats and emaciation, and other symptoms suggestive of tuberculosis. The diagnosis was finally established by the discovery of a periosteal node and by the cessation of fever, on the administration of mercury and potassium iodide. The writer mentions the fact that syphilis may be attended with persistent fever apart from secondary infections and complications. Such febrile reaction of syphilis is more common than is supposed. The fever is variable in type, is commonly of low grade, and intermittent. It occurs chiefly in those cases in which the liver is involved. It often simulates tuberculosis, sepsis, or malaria, especially the first. The tuberculin test is of little value in differentiating syphilis from tuberculosis, and is often attended with risk. Every obscure case of fever should lead to an exhaustive search for the stigmata of syphilis. The therapeutic test is permissible, and in the great majority of cases the fever rapidly disappears under the treatment with mercury and potassium iodide. The best method of treating these cases is by moderate doses of alteratives; the large doses are unnecessary and may be harmful.

Uterine Sarcoma a Rare Disease.

Theodor von Wenczel (Zent. f. Gyn.,) describes sarcoma of the uterus as a very rare form of malignant disease of that organ. Gurlt found 2 cases of sarcoma among 2,649 uterine growths, while there were 1,572 carcinomata, and 883 fibromata. Roger Williams found 8 cases among 4,115 growths. Contrary to the accustomed location of carcinoma in the cervix, sarcoma occurs generally in the body of the uterus. Poschman gives 277 carcinomata of the cervix, against 10 of the corpus uteri, while there were 11 sarcomata in the fundus to 5 in the cervix. Krukenberg gives 19 in the fundus to 1 in the cervix. The sarcomata arise from the mucous membrane in most cases, less often in the substance of the wall, when they result from the degeneration of a fibromyoma generally. Primary origin of sarcoma in the uterus is so rare that during 15 years no such case has been reported. Most of the sarcomata of the uterus are spindle-celled, much less often of the small round-celled variety. The author has observed a case of sarcoma of the cervix, the rarest form of this variety of tumor. It arose from the wall of the uterus, not from the mucous membrane, and was a primary growth, not a degenerated myofibroma. It was of the round-celled type. It occurred in a woman 46 years of age, as a round, soft mass in the vagina, mostly covered with normal mucous membrane. A portion of the tumor was removed and examined, and then the extirpation of the entire uterus was undertaken successfully.

Molluscum Fibrosum.

Noyes (Intercolonial Medical Journal of Australasia) states that the so-called molluscum fibrosum growths arise from the branches of the cutaneous nerves by proliferation of the endoneurium. The new tissue may remain confined by the perineurium for a period, or it may break away and become diffused at quite an early stage, spreading into the adjacent tissue, surrounding any or all of the structures of the corium and subcutaneous tissue, including

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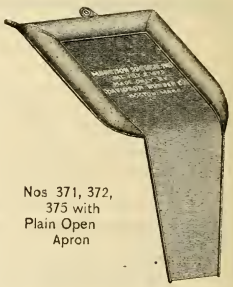

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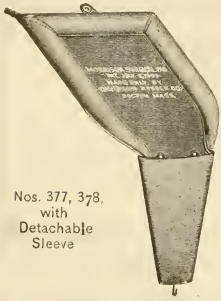

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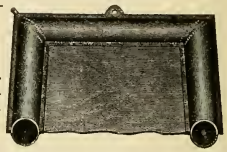

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altered nerve branches themselves which are still confined by the perineurium. The proliferation of the endoneurium and the consequent disappearance of the nerve fibers and their axis cylinders leads to more or less loss of sensation in the cutaneous surface overlaying the new tissue. Similar changes in the nerves composing the vasomotor apparatus of the cutaneous vessels involved in the new growth may account for the clinically observed discolorations in connection with them. The small nodular projections, due to proliferating endoneurium confined by perineurium, may occur in the smaller nerve branches, giving microscopically a neurofibroma-like appearance, without being clinically recognizable as such.

Foreign Bodies in the Uterus.

Knoop (British Gynecological Journal) reports two interesting cases: (1) A woman of fifty-seven in whom a foul discharge came on suddenly was admitted under suspicion of carcinoma of the body of the womb Examination led to the removal of an extremely rusty hairpin, which according to the patient's statement must have lain in the uterus for six years. (2) A young woman of nineteen in labor, the child's breech presenting. The midwife found against the child's sacrum a tumor, which proved to be a ball as large as a walnut, composed of crumpled-up newspaper. The patient admitted that she had habitually used such a plug as a preventive, and that she had not been able to extract the last, which, however, had been introduced before the beginning of her pregnancy.

Treatment of Exophthalmic Goitre.

McKenzie (The Practitioner) mentions various methods of treatment of exophthalmic goitre. Each case must be taken on its own merits, and the rigor of the treatment must vary with the character of the symptoms. Rest, mental and bodily, is of prime importance. Any kind of mental excitement aggravates the disease. Work should be stopped or but moderately indulged in. Plenty of sleep should be taken and hurry should be avoided. In more severe cases the patient should be kept in bed as long as the pulse rate is 110 or more per minute. The diet should be full and nutritious.

Medical treatment is advisable through all the stages of the disease. The drug which is the mainstay is belladonna. It probably acts by quieting the nerves and by diminishing thyroid secretion. It should be given in doses sufficiently large to cause dryness of the throat. Heart tonics, as strophanthus or digitalis, should be given. Electrical stimulation of the vagus is sometimes beneficial. The good effect probably comes from slowing the heart. Serum treatment has been unsuccessful.

The operations most favored aim at reducing the quantity of thyroid secretion formed either by tying the principal arteries or by partial thyroidecomy. The most favorable cases for operation are those in which the enlargement has preceded the other symptoms. Operation is unsuitable when tachycardia and emaciation are extreme. The mortality shortly after operation may be high, due to the bad effect which general anesthesia has on these patients and the introduction of excessive quantities of thyroid secretion at the site of the operation. Partial thyroidectomy is preferable to ligation. Out of fifty-nine cases operated upon by Kocher four died in the first ten days, forty-five were cured, and the remainder were improved.

Obstetric Views that Need Reviewing.

Stephenson (Scottish Medical and Surgical Journal) states that a prolonged first stage is more frequently due to unfavorable mechanism than to rigidity of the os.

The size of the os is not the sole criterion of progress in the first stage. Along with this inner ring must be taken an outer ring, the vaginal attachment; the relative condition as to dilatation of both must be noted. The dilatation of the outer ring is mainly dependent upon the peripheral force, that of the inner ring upon the wedge action. The outer ring may be fully dilated before the inner has begun to open; defective dilation of the outer ring may be the cause of delay in dilatation of the os.

The fetus is the predominant factor throughout labor; the presenting parts exerts an influence on the first stage.

A moderate amount of liquor annii is more favorable than when it is considerable, relatively to the bulk of the fetus. It is more favorable when the quantity permits of an early combination of direct pressure with the action of the amniotic fluid. An excess liable to retard progress begins when

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the fetal body is entirely surrounded by the waters; and defective action is greater the larger the quantity.

Until the head is born, dilatation and propulsion are effected simultaneously by elongation of the fetal ovoid, not by pressure on the breech. Dorsal extension is an important factor in the mechanism. Whatever hinders this action renders the process less facile; this may be an excess of fluid, but also it may be the position of the fetus.

The head is an efficient dilator, even in the first stage; but till the outer and inner rings are sufficiently dilated to admit of the head engaging them, there is a decided advantage in retention of the fore-waters. After the os is half-way dilated, unnecessary delay may arise from integrity of the membranes.

Mustard in Capillary Bronchitis.

Heubner and Herzfeld (La Reine Medicale de Louvain) according to Heubner, a pint and one-half of hot water is used; to this is added 500 grammes of fresh mustard —sometimes more. Boil until the essence makes the eyes and nose of the operator water. This takes about ten minutes. A piece of flannel is dipped in this mixture and the child's chest completely covered. The application should be used for ten or fifteen minutes until the infant's skin is red. A tepid bath is then given the child, so that all small particles of mustard are removed, and it is then wrapped up in flannel wrung out in very warm water, this application being kept on until profuse sweating is induced, say a half-hour or an hour. If the child's face grows red remove sooner. Another warm bath is now given and then a tepid sponge bath, then a cool water lotion is applied. The patient is then dried off, wrapped up warmly and allowed to remain without other treatment the remainder of the day. The results of this revulsion we noticed the following day. The fine rales diminish, respiration is freer and a betterment is observed. The operation is to be repeated for several following days, but only one application in twenty-four hours. Herzfeld's procedure is somewhat similar. He mixes 250 grammes of water, 250 grammes of alcohol and 15.50 centigrammes of essence of mustard. The chest of the child is covered with a flannel saturated in this mixture and the application allowed to remain until the skin reddens and the circulation improved. The revulsion should last half an hour or less. Equal parts of water and alcohol are then used on a piece of flannel placed around the child's chest, kept there for about half an hour. The infant's skin is then dried off and it is warmly covered. This application may be made several times a day at first. This variety of simple mustard baths permit us to avoid the emanations of mustard that so often irritate a child's mucous membranes.

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Ateleiosis and Progeria.

Gilford (British Medical Journal) calls attention to this important subject. The author considers two varieties of ateleiosis. In the one, which may be termed the asexual variety, there is conspicious delay of development of the whole body, some organs or parts being affected more than others, the sexual organs being most backward of all. In the second, or sexual variety there is in early life a similar delay of development of the body as a whole until puberty is reached. The sexual organs then ripen, fusion of the epiphyses takes place; and the individual affected becomes set or stereotyped into a being who is in some respects a child and in others a minature man or woman. An adult of the asexual type retains the coarser features of a time of life near that at which the disease began; while an adult of the sexual variety combines with the stature, proportions, and physiognomy of childhood all other indications of maturity. Gilford feels that these are apparently two varieties of the same disease, but possibly their differences are so great that some may regard them as specific diseases.

Asexual ateleiosis is a form of infantilism, but, unlike ordinary infantilism, it does not seem to have any connection with cretinism, syphilis, congenital heart disease, pancreatic insufficiency or any other of the known causes of delayed development. It seems to be more of a delay than an arrest of development since those affected may continue to grow and develop for many years after these processes usually cease. It resembles cretinism in the time of the appearance, for though it may begin at any period of development, it favors that of infancy. It is best divided into three forms according as it begins: 1, before birth; 2, in infancy and early childhood, or 3, in the latter stages of development. It may not show itself until the normal stature of the individual has been attained, hence, its subjects are not necessarily dwarfs.

In the case reported by Gilford there was a general delay of development. The generative organs at the age of 12 years appeared like those of an infant at birth; his physiognomy and configuration of the head resembled that of a child during its second or third year, and the size and appearance of his bones were those of a boy of 3 years.

In cases of sexual ateleiosis—if it be really a variety of ateleiosis—differs from the asexual form in the following particulars:

1. It is more often hereditary. Asexual ateleiosis can not, of course, be passed on from parent to offspring by direct descent, and no instances are known in which it is seen among brothers and sisters, whereas, in a large proportion of the sexual variety one or the other of these forms of hereditary occurs.

2. The sexual organs apparently mature at the usual age, and their maturation is accompanied with some of the more remote indications of puberty—namely, the appearance of sexual hair, and in women the increased development of the pelvis and of the breasts.

3. In men the muscular system develops to a greater extent than it does in asexual ateleiosis.

4. The skeleton.

Perhaps the best specimens of this type are represented by "Tom Thumb" and his wife.

The sexual form of ateleiosis approaches so nearly the normal that inasmuch as it is sometimes transmitted from father to son, there seems a possible danger of the proportion of dwarf families and the perpetuation of these human beings. There seems to be, however, a tendency of these dwarfs to become sterile early. The propogation of sexual ateleiosis may terminate in asexual ateleiosis. Gilford presents three cases of sexual ateleiosis.

Progeria.—In progeria we have a disease, which is, in some respects, the exact opposite to the foregoing, and in other respects is allied with it. Only two well marked instances have been reported. The main features of this disease may be divided into three categories, according as they show premature old age, delayed development, or some approach to the normal development.

Accelerated development, or senilism, was indicated by the facial and general appearance, attitude, loss of hair, muscular and fatty emaciation, as well as in the mode of death. Autopsy showed extensive atheromatous degeneration of the heart and aorta; senile degeneration of the renal vessels and suprarenal capsule; atrophied intestines.

Delayed development, or infantilism, was shown by the stature and proportion of the body which were those of late childhood; by the backward development of the membranes and formed bones, by the extremities.

A near approach to the normal was indicated by the size of the liver, the relative size of the cartilage formed bones, and by the condition of the brain and sexual organs.

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Gum Lancing.

Guthrie, in The London Practitioner, says that many lives of children are probably sacrificed yearly because of the popular and professional prejudice against lancing. Such statements are pious opinions, says the author, which lack confirmation. Personally, he has grave doubts whether painful dentition has ever been the cause of death or that life has ever been saved by lancing gums. Even the oft quoted cases of fatal so-called "teething convulsions" are, in his experience, attributable to gastro-intestinal disorder. It is difficult to believe that "threatened meningitis," whether tuberculous or other, has ever been averted by the lancet or that the crisis in pneumonia can be hastened or diarrhœa cured by such procedure. At the same time there can be no doubt that local pain may be relieved by blood letting. Simple scarification of the gum is all that is needed. Such barbarous usage as the removal between elliptical incisions of a portion of the gum over a tooth, supposed to be offending, is not to be commended. As well as being cruel it is illogical; for if the condition of the gum were merely that of tension over a tooth a simple incision should gape at once and so relieve the symptoms.

At the present time it is hardly likely that the purple hæmorrhagic swellings of the gums met with in infantile scurvy should be mistaken for signs of disordered dentition requiring local venesection. Yet there is ground for suspicion that in former days many a case of scurvy was so maltreated and ended fatally.

Pneumococci Arthritis in a New-Born Child.

Larrieg (Archives Gen. de Med.) says that the following case, which was observed in the clinic of Prof. Dieulafoy at the Hotel Dieu, Paris, appears to be the only one on record in which pneumococcus arohritis was observed in the newly-born. A male infant was born after a difficult first labor on Sept. 5, 1904. He was the subject of hare-lip and cleft palate. On the 8th a plastic operation was performed on the lip. He progressed favorably until the 12th, when there was a little sero-purulent discharge from the orifices of the sutures. When the latter were removed, on the 15th, union was found to be very incomplete and the wound was covered with pus. On the 20th the edges of the wound were greyish-red and covered with pus. The general condition was bad; there were vomiting and fetid stools, and he lost weight. On the 24th his mother noticed that he cried when placed on the right side or when the right arm was touched, and that the right shoulder was red and swollen. On the 25th the swelling was greater and the arm immobile. On the 20th he was taken to the hospital. He was wasted and pale and the fontanelles were depressed. There was considerable swelling of the right shoulder joint, which was of the size of a mandarin orange; the overlying skin was red and edematous and showed dilated veins. Deep fluctuation was felt at the anterior border of the deltoid. Purulent arthritis was diagnosed. Disseminated rales were heard all over the chest. The spleen was palpable. The temperature was 100 degrees in the morning and 101.5 in the evening. On the 27th the skin was dry, the eyes were sunken, the temperature was 104.2 degrees, and death occurred.

Necropsy.—Thick, viscid, greenish pus—typical pneumococci pus—was found in the right shoulder joint. The synovial membrane was thickened and reddish, and covered in places by an adherent fibrino-purulent layer. The articular cartilage was roughened and eroded. The lungs were congested and edematous, especially at the bases. There were no signs of pneumonia or broncho-pneumonia. The pus contained disintegrated leucocytes and a large number of diplococci, which on staining and on culture were proved to be pneumococci.

Of thirty-one cases of pneumococci arthritis collected by Cave only two occurred in children, at the ages of five and eight years respectively. Pneumococci arthritis usually is secondary to pneumonic or broncho-pneumonic infection (in 28 cases out of 32). In this case neither was present, and the source of infection evidently was the wound in the mouth, for the pneumococcus was found in the pus. As the organism often occurs as a saprophyte in the mouth, infection of wounds in this locality might easily occur.

Generalized Diphtheritic Paralysis.

Raviart and Dubar (L'Echo Medical du Nord) say that paralysis is a frequent complication of diphtheria (occurring, according to Gassicourt, in over 23 per cent. of the cases), it is usually limited to the palate with or without implication of the pharynx and larynx. But there is a rare generalized form in which the eyes, trunks, limbs, sphincters, respiratory muscles and heart are involved. This form is also accompanied by sensory derangements, and bilateral deafness and optic neuritis have been observed. A woman, aged 29 years, contracted diphtheria, which began on the left tonsil and extended to the other side, and later to the nose. For twelve days her state remained grave, but she then made good progress till the thirtieth day of the disease, when on swallowing, liquids passed into

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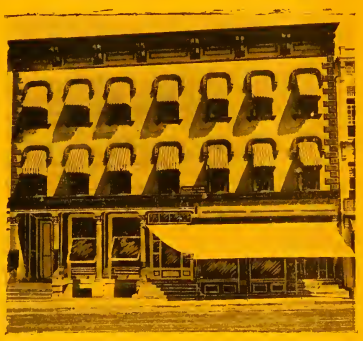

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the nose and at times into the larynx. Examination showed paralysis of the soft palate, chiefly on the left side, and paralysis of the adductors of the vocal cords. The palate and surrounding parts were also completely anesthetic. While the difficulty in swallowing improved, the patient noticed defect of vision for near objects. She could read only large type when placed at least 20 inches from the eyes. Distant vision was intact. Left internal strabismus then developed, with occasional diplopia. The pupils were sluggish; the left was larger than the right. About the same time slight paralysis of the lips was noticed, with escape of saliva during the night. The abdominal muscles were then involved, the patient being for some days unable to make efforts to defecate, and for two days the anal sphincter was paralyzed. Some increase of the paralysis of the ocular muscles occurred during the menstrual period a week later, and as this improved the extensor muscles of the lower limbs became involved and the patient became ataxic. When the paralysis of the lower limbs attained its maximum the difficulty in deglutition had disappeared, but paralysis of the extensors of the upper limbs took place, extending to the trunk, so that for almost a month there was generalized paralysis, and she could neither stand nor sit upright. The left arm and right leg were most severely affected. There was no paralysis of the face, tongue or diaphragm. The reflexes were entirely abolished. Sensation was impaired all over the skin, especially in the neighborhood of the hands and feet. For some days at the beginning of the paralysis of the limbs there was loss of sense and taste. The patient became extremely emaciated and the muscles seemed to have atrophied. Improvement began about six weeks after the onset of the paralysis and was very gradual, the arms recovering first; but it was not till two months later that the return of motion and sensation was complete, the paralysis having lasted three and one-half months.

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Diagnostic and Therapeutic Value of Lumbar Puncture.

Quincke (Deutsche med. Woch.) says that the greatest amount of cerebrospinal fluid is to be found in the brain ventricles and the meshes of the pia mater and arachnoid membrane. The situation of the fluid and its composition are the points for consideration. The normal cerebrospinal fluid is transparent and clear as water. Serous meningitis, and hydrocephalus have equally clear fluid. only here the amount is increased above normal. Normal fluid averages ½ to 2 cells in the cubic millimetre. The fluid is alkaline, contains serum albumin, serum globulin, and sugar. Sp. gr. 106 to 1007. The chemical and physical examination of the fluid are as yet of no definitely positive value. The microscopical examination is the essential one. The pressure should always be estimated when puncture is done. The normal is equal to 125 m. m. of water. Inspiration causes it to fall, while expiration causes a rise. The difference is about 20 m. m. The pressure should never be reduced below 80 m. m. and as a rule not lower than 100 m. m.

Headache, vertigo, and vomiting may arise following the removal of the cerebrospinal fluid. Keeping the patient quiet in the horizontal position is necessary.

Acute serous meningitis fluid resembles the normal cerebrospinal fluid, the albumin contents usually normal rarely reaching one-tenth of one per cent. The cellular constituent is not increased but at times a slight fibrin formation is present. The rise in pressure is the chief point, going up to 200 to 300 m. m. water.

Purulent meningitis rarely gives a thick purulent fluid, the fluid, however, contains many pus corpuscles which give it a faint to a marked turbidity. Acute forms show chiefly polymorphonuclear pus cells; chronic cases show chiefly lymphocyte types. Endothelial cells are observed in all. The pressure is less in thick purulent exudations on account of the blocking, while thinner exudations have no obstruction and thus the pressure is easily accessible to estimation.

Chemical Findings in Nephritis.

Rumpf (Muench. med. Woch.) discusses the relation of sodium chloride to the oedema met with in nephritis. His studies are based on the suppositions that

1. Advanced cases of nephritis must show a larger amount of Na Cl than other disease;

1. The organs should, when oedematous, have an excess of Na Cl as well as the excess of water;

3. The oedema fluid and fluid collections in the various body cavities should contain as high a percentage of sodium chloride as that met with in other conditions.

His findings suggested that

1. The kidneys in nephritis often hold more sodium chloride than the blood and other organs. The amount may be very small in the early stage.

2. Many cases of nephritis show an increased amount of sodium chloride in the blood and tissues. Some cases of chronic nephritis have, on the contrary, a reduced amount. The sodium chloride amount in nephritis does not give the highest figures.

3. The fluid collections may show an increase or decrease, so that their development can not be said to depend on an increased amount of sodium chloride.

4. In a number of cases with peritoneal fluid collection not due to nephritis the sodium chloride percentage was much greater than that met with in nephritis. Hence it is not to be admitted that the retention of sodium chloride is responsible for the ascites or other collections. Potassium, sodium calcium, and magnesium, as well as chlorine are retained.

In the earlier stages of chronic nephritis he could demonstrate a reduction of the watery constituent of the blood and tissues. In the later stages a reduced output of water showed the reverse.

Gall Stones.

Morison (Edinburgh Monthly Journal) gives the following facts: That gall stones may be present and cause in an uninflamed gall bladder no symptoms. Cholecystitis is the necessary irritant. If symptoms have once occurred they usually recur. Gall stone attacks are exceedingly painful, because when cholecystitis is present, the efforts of the gall bladder are to expel its contents. Serious symptoms are usually due to stones which are in the ducts. Repeated attempts on the part of the unstriated muscle of the gall bladder to expel its contents lead to its hypertrophy. If these attempts are unsuccessful inflammation and degeneration of the organ result, possibly gangrene and rupture, the latter resulting from tension. Pancreatitis may simulate gall stone disease and make a diagnosis impossible. The general condition in acute gall stone disease is that produced by acute septicæmia, and is caused by infectious germs. The gall bladder may contain bile, pus, or clear mucoid fluid. Spontaneous cures sometimes occur, but one is more likely to meet with fibroid thickening of the bladder, ulceration of the ducts, abscess of the liver, and other serious conditions. The treatment of this disease is surgical at the earliest possible moment.

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THE success of Fellows Syrup of Hypophosphites has tempted certain persons to offer imitations of it for sale. Mr. Fellows, who has examined samples of several of these imitations, finds that no two of them are identical, and that all of them differ from the original in composition, in freedom from acid reaction, in susceptibility to the effects of oxygen when exposed to light or heat, in the property of retaining the strychnia in solution, and in the medicinal effects.

As these cheap and inefficient substitutes are frequently dispensed instead of the original, physicians are earnestly requested, when prescribing the Syrup, to write "Syr. Hypophos. FELLOWS."

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Inflammation of the Pharyngeal Tonsil.

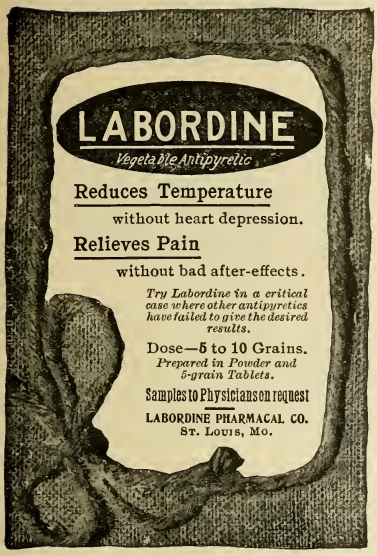
P. McBride (The London Medical Lancet) says that when a patient suffers from hypertrophy of the pharyngeal tonsil he usually is attacked with colds in the head. At such times the adenoid tissue shows enlargement and congestion and is covered with mucus which it is secreting freely. Usually this escapes observation, for the practitioner does not as a matter of routine examine the pharynx; but it has been seen by specialists, and he has observed several cases. Such inflammation of the pharyngeal tonsil is accompanied by fever and follicular inflammation of the adenoid tissue. It it is examined with the mirror, spots of white material may be seen covering this part, similar to the condition found in the faucial tonsil in attacks of follicular disease. In one case the author observed that the patient felt discomfort behind the palate. On examination he found the nasopharynx covered by a pultaceous gray material, looking like a thick false membrane, and concealing the Eustachian orifices. The usual symptoms of constitutional disturbances were present. A swab from the region showed the staphylococcus. The case yielded readily to nasal syringing with a mixture of boric acid and peroxid, combined with the use of purgatives. The particular importance of this case is in the bacteriological differentiation between the follicular inflammation and diphtheria, for at first the doctor believed the lesion to be diphtheritic.

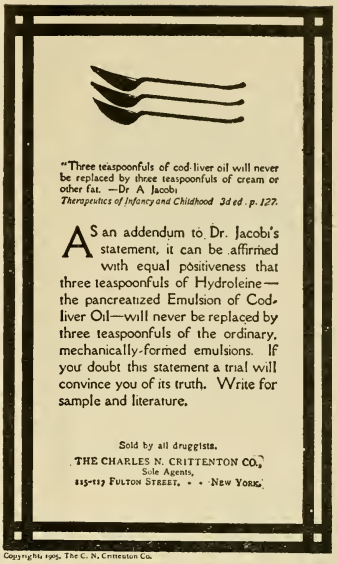
Situs Transversus and Atresia of the Pylorus.

Little (Johns Hopkins Hospital Bulletin) describes a case of a newly-born child suffering with atresia of the pylorus. On account of the obstruction a gastro-enterostomy was performed on the sixth day, but the child died fourteen hours after the operation. The diagnosis of complete obstruction of the pylorus or upper portion of the duodenum was based on the following considerations: (1) The vomiting of a large amount of amniotic fluid shortly after birth; (2) recurrence of vomiting not regularly after the ingestion of small amounts of fluids, but as soon as approximately 20 to 30 c. c. has been given; (3) the presence in the stomach of the entire amount of a feeding (15 20 c c.) when the stomach was washed out two hours after its ingestion; (4) the absence of bile-staining of the vomitus or fluid obtained at lavage; (5) the presence and passing of meconium gradually showing more and more the appearance of bile; (6) the absence of any sign of digested milk in the stool as late as the seventh day; (7) the uniformly subnormal character of the temperature; (8) the persistent loss of weight; (9) the anuria; (10) the fact that the mother had hydramnios. At autopsy there was found complete transposition of the thoracic and abdominal organs. The stomach showed that the pyloric end ended abruptly behind and to the left of the head of the pancreas.

Nervous Disease After Electric Traumatism.

Raebiger, in The Deutsch. Med. Woch. says that the diseases caused by electric accidents in telephone operators are to be considered as mixed manifestations of hysteria, neurasthenia and hypochondriasis, or eventually as a simple psychosis. There is no reason to assume the existence of pathologico-anatomical alterations of the nervous system, especially in the absence of positive information concerning the passing of an electric current through the body, or the presence of psychical shock. The writer admits the possible occurrence of organic changes (such as cardiac dilatation) developing on a basis of constantly recurring functional disturbances.





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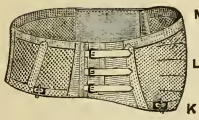

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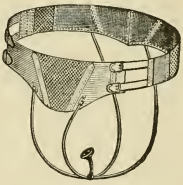

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Small Pox.

There has been an epidemic of small pox in the neighborhood of Hope Mills, N. C. Over two hundred cases have been reported. It seems from reports that the epidemic is a mild one. The health authorities in that section are taking the proper precautions to prevent the spread of the disease.

Mecklenburg County Medical Society.

At the December meeting of the Mecklenburg County Medical Society the following officers were elected for the year 1906: Dr. W. W. Pharr, Newells, President; Dr. Walton O. Nisbet, Charlotte, Vice-president; Dr. Parks M. King, Charlotte, secretary and treasurer; Drs. John R. Irwin and Thos. F. Costner, Charlotte, censors; Drs. I. W. Faison and Robert E. Mason, Charlotte, delegates to the State Medical Society, and Drs. Charles A. Miesheimer, Charlotte, and S. M. Henderson, Croft, alternatives.

Nutrivine.

One of the most difficult things that the doctor has to contend with is to procure a reliable article of Cod Liver Oil. In Nutrivine, prepared by the Peter-Neat-Richardson Co., Louisville, Ky., will be found an example of a properly prepared medicine of this character. It contains the properties of the best Norwegian Cod Liver Oil, without its nauseous and offensive taste.

Miscellaneous.

Texas State Journal Rules for Publication.

The Texas State Journal of Medicine, or the Trustees who govern it have adopted the following rules regulating papers that have been read at the association meetings.

First.—Edit all papers, reports and discussions, cutting out introductions, apologies, digressions, and other matter foreign to the theme.

Second.—Omit all discussions of papers not corrected by authors, and returned promptly.

Third.—Publish first, papers read before sections. Of those read by title or previously printed in other journals, publish towards the end of the year as many as there is room for, selecting those of most scientific and general interest.

Fourth.—Request of authors of papers that are longer than the constitutional limit, condensation, or privilege of condensing or abstracting. In case of refusal, delay publication, and if space does not permit printing by the end of the year, return manuscript to authors.

Fifth.—The trustees reserve the right to refuse to publish any paper previously published.

Alkaloidal vs. Fluid Medicines.

In a recent issue of The Eclectic Review Dr. Pitts Edwin Howes makes some telling points concerning the superiority of liquid medicines over alkaloids.

"Experimentation," he says, "has demonstrated that liquids are much more promptly absorbed than articles of a semi-fluid or more compact nature.

"The alkaloids, when you have said the best you can in their favor, are, at best, only a part of the original plant. We are apt to term them the active principles of the plant. How are we to demonstrate this fact absolutely? Can it be demonstrated? I think not. Who would be rash enough to assert that all of the good of cinchona lies in the quinine, or that of nux vomica in the strychnine? And not only of these two, but also of the entire list of plants, which, by means of manipulation, can be caused to give up their alkaloidal principles.

"Those who are at all familiar with the early history of the Eclectic School of Medicine know how nearly it came to shipwreck because of the wild enthusiasm over the idea of alkaloidal medication. Fortunately, the error was discovered early, and the more rational and scientific method of using the entire plant was substituted. Without doubt there are fewer therapeutic nihilists today among the Eclectic practitioners than any other school of medicine. It is due to the fact that they use almost exclusively the liquid medicines."

Dr. Howes' remarks are pertinent. We have long contended that the full and most beneficial medicinal action can not be obtained by the use of isolated principles of drugs. The resinoid distraction of the early Eclectics is still remembered tremblingly by those who had the good of Eclecticism at heart. The divorced principles of plants do not in any sense fulfill the same therapeutic uses that result from the employment of the naturally combined principles of plants. These principles have thus far been best obtained and preserved in liquid medicines. The action of opium, as a whole, differs essentially from that of its many alkaloids. Gelsemine, veratrine, and aconitine are dangerous and unruly medicines in any doses, and do not meet the indications for gelsemium, veratrum, or aconite.

We have nothing to say against the power of some alkaloids. That they possess great force is cheerfully conceded. But in the doses ordinarily used we believe the action of the more powerful ones physiological or even toxic, and not medicinal, as that term is employed in Eclectic medicine. Years of trustworthy experimentation with the alkaloids will undoubtedly establish many valuable uses for them, but that the specific indications, as now applied to the medicines evolved in Eclecticism, can be applied to the alkaloids no reasonable physician can admit. If alkaloids do not represent the full virtues of the plant, they surely do not fulfill indications which have been evolved from the use of whole plant preparations. We wish alkaloidalists success in anything that will make for the good of medicine and humanity, but we do not hesitate to put ourselves on record as charging it a reprehensible practice to take bodily the indications for full plant medicines and apply them to fragments of those plants. How quickly have the indications and uses of alkaloidal medication grown into massive proportions! Compare their alleged virtues and indications with those of Eclectic fluid medicines, and note the "source of their being."—Eclectic Medical Gleaner.

Dr. S. N. Glenn, of Gastonia, has been elected physician of Gaston county, vice Dr. Henry F. Glenn, resigned. Dr. Glenn is a bright young physician and will make an excellent official.

Dr. Wellington S. Briggs, of Easterly, Texas, died January 14th. He was found dead in his home. He graduated at the University of Nashville in 1862. During his long and useful life he occupied many positions of honor.

A Valuable Nerve-sedative and Tonic.

Daniel's Concentrated Tincture Passiflora Incarnata is a nerve-sedative and tonic. Its action is directed against the ganglia, so that it may be used with great advantage in all nervous diseases. It relieves the tension to which the nerves are subjected, gives relaxation to the patient, and places him in a condition sound and natural. Its tonic properties are most beneficial, being an invaluable aid in convalescence.

Dr. Henry W. Whitfield at the age of seventy four died at his home at Bakerville, Tenn.. January 6th, after a short illness. Dr. Whitfield was a prominent physician. He graduated at the University of Nashville in 1859.

Dr. James Christopher Deaton, in his home in Richmond died January the 12th.

Medical College For Lexington, Ky.

The president of the Kentucky State College, Mr. James K. Patterson, has asked the general council of Lexington for an appropriation of $12,000 to establish a medical college in connection with that institution. We like to see these reports of medi-

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cal colleges springing up all over the South. It means a great deal for this section of the country. Hospitals will be built and a development of the medical profession that we never would have without them.

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I find ANGIER'S PETROLEUM EMULSION of benefit, not alone in tuberculous cases where it occupies so large a place, but also in many cases of general debility, anameic conditions and wherever the nutritive processes of the system are faulty it supplies nonrishment and medicine at the same time.

I have a few cases of chronic bronchitis that find it the only thing to stand them along through the winter—these "winter coughs" that we do not expect to cure, especially in elderly people, but which we must alleviate. Young or old, take this remedy with equal facility and assimilate it alike.

ANGIER'S is unique in its field, which is a large one.

A. P. REED, M. D.,
Naples, Maine.

The Epidemic of Yellow Fever at New Orleans.

The reports that have been obtained from official sources show that during the yellow fever epidemic of last year in New Orleans, that there were 10,804 well developed cases that were officially reported. Of these 1,151 proved fatal. The average death rate, therefore, of these cases, as shown by the records, was 10.46 per cent This was quite a contrast with the records of some previous epidemics that they had there, when the mortality run as high as 85 per cent.

Salicylate of Iron.

Gray, in the Edinburgh Medical Journal, November, 1905, mentions the use of a mixture of the tincture of perchloride of iron and salicylate of soda for erysipelas, acute tonsilitis, in some cases of croupous pneumonia, puerperal sepsis, sublingual adenitis cellulitis, and rheumatic endocarditis with hyperpyrexia, etc. The writer refers to the deep violet color which such a combination forms, and says it can be avoided or redissolved by the addition of a small quantity of potassium chloride. Salicylate of iron, he maintains, acts as a powerful febrifuge even in small doses, and does not produce diaphoresis. Further, that its action is not affected whether it is used both in the precipitated and dissolved states. Out of fifty cases of erysipelas, he says that none lasted for more than forty-eight hours after the commencement of the administration, and the headache and general malaise disappeared at the end of eight hours; the only supplementary medical treatment was an evening dose of 1 to 2 grains of calomel or a saline morning

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aperient. The mixture employed was made up by dissolving 1 drachm of sod. salicyl. in 2 ounces of water, which was added to 2 drachms of tinct. ferri perch.; pot. chlor., ½ drachm; glycerini, ½ ounce; and water to 3 ounces. The whole was made up to 8 ounces, the dose being two tablespoonfuls every three or four hours. In acute tonsilitis resolution and cure occurred generally in twenty-four to forty-eight hours, and even in cases where suppuration had occurred the pus was rapidly absorbed. Along with the internal use of the salicylate of iron the author employed a gargle of iodine solution, 7½ to 30 minims of tinct. of iodi to the pint of water, and used four-hourly; and, further, he paints the tonsils and fauces with the pigment of—R. Tinct. iodi, 3ii.; glyc. acid. tannici, 3i. He omits to mention that this application is generally very painful; at least this has been my experience with the pure tincture, but there is no doubt about the good effects which it produces. When the pain of painting is severe, a gargle of plain warm water relieves it. In most membranous cases the author says the membranes disappear in the first twenty-four hours, but in one case not until the fourth day, and in this he replaced the gargle by a weak one of permanganate solution. The author points out that it is inadvisable to continue the use of the iodine preparations for the throat or nose longer than three days, as it may produce an inflammatory condition, which a weak alum sulphate solution relieves.

Epileptic Colony For Virginia.

The Virginia State Hospital or its Board of Directors, at a recent meeting held at the Central State Hospital at Petersburg on January the 11th adopted a resolution advising the General Assembly to establish a hospital for epileptics. This body named a committee to present these resolutions to the Legislature and prepare a bill for the establishment and organization of the proposed enterprise. Dr. W. F. Drewry at this same meeting was unanimously elected superintendent of the Western State Hospital, at Staunton, to succeed the late Dr. Blackford. Dr. Drewry has for a great many years been superintendent of the Central State Hospital, but has resigned to accept this new position.

Dr. Wyeth on General Lee.

It was a graceful and eloquent address that Dr. John A. Wyeth delivered last week before a company assembled in New York to do honor to the memory of the illustrious General Robert E. Lee, on the occasion of Lee's birthday. The whole American people, Northerners and Southerners alike, revere the character of General Lee, and it cannot but be gratifying to the medical profession that one of their number gave such fit expression to their feeling.—New York Medical Journal.

The Egg-O-See Cereal Company are distributing a small book entitled "Back to Nature." It contains many receipts for dainty dishes prepared with Egg-O-See, which will add materially to the receipts of the diet kitchen of the various hospitals as well as the home kitchen.

It is not an appeal to the sick, but rather to those who want to increase their capacity for enjoyment and for work. It is a suggestion that will seem to lighten the burdens of the women of the home; it is an appeal to mothers who wish their children to be healthy and happy; to be first in their studies through a proper foundation of health and vitality which comes only from right living.

That the average American eats too much red meat and takes too little exercise is generally understood. Also our excessive use of white flour is, combined with the red meat, making us a nation of dyspeptics. The value of whole wheat is well illustrated by the rations of the Japanese army during their recent campaign. The Japanese army biscuit consists of a cake of one fourth rice and three-fourths whole wheat, flavored with both sugar and salt. It is placed in water and allowed to swell up before being eaten. Analysis has demonstrated that a grain of wheat contains all the necessary elements for sustaining life, and especially tissues. It therefore follows that whole wheat is the ideal foundation for a healthful diet. With this foundation the normal appetite may be trusted to suggest such other wholesome additions as may be needed. Many who realize these truths find whole wheat in its ordinary form unpalatable and it is to these that Egg-O-See makes its strongest appeal.

Egg-O-See is the whole of the wheat, the most valuable food in nature's store-house, in its most palatable form, grown in Sunny California, cooked and flaked, preserved crisp and delicious in air-tight inner-lined packages, never touched by the human hand from the reaping of the grain to the serving at the table.

Egg-O See is all that whole wheat is and more. It has the advantage of an exquisite flour. It is cooked for a period of two hours, then baked. Whole wheat bread is not cooked, it is baked only, hence it is not so palatable nor is it so easily assimulated as Egg-O-See.

According to Edward H. Keiser, Professor of Chemistry in Washington University, Egg-O See contains a higher percentage of protieds, fat and ash than a Patent Roller Process wheat flour. The ash, which is rich in phosphates and iron compounds, is very small in Roller Process flour. The fibre in Egg-O-See is also of great value in that it assists the digestive process. This is almost entirely lacking in flour.

The seven days menus given here, showing the many ways in which Egg-O See may be served at every meal, is worthy of a close inspection.

This brief preachment contains, with illustrations, a few simple and wholesome exercises, which no doubt, if carried out

GOLD MEDAL
ST. LOUIS, 1904

BRONZE MEDAL
PARIS, 1900

systematically, would do as much for the body as intellectual training will do for the mind. It will take patience, perseverance and persistence. Beginners should be careful not to overdo. A tendency to stoop, hollow chest, or weakness of any sort in a child may be readily corrected by these exercises. Parents should see to this as there is nothing so fits one for the battle of life as a good physique and the personal magnetism of perfect health.

The dainty dishes prepared with Egg-O-See were originated and fully tested by Mrs. Lily Haxwoth Wallace, of New York, the noted cooking expert and lecturer on household economics. Since their original publication they have been used in thousands of homes with great satisfaction, as they make it possible to serve delicious, wholesome Egg-O-See in an ever changing variety at any meal.

Malarial Problems in Panama.

Now that the Government of the United States has taken seriously in hand the construction of the Panama Canal, they find that the greatest feature in the problem before them is, as it was in the case of the French, the hygienic one. The gruesome mortality and sickness among the laborers employed by the French is still fresh in people's minds, and profiting by their predecessors' experience the Americans are preparing to take steps to prevent any repetition of such calamities. From the first report of the chief sanitary officer we learn that malaria is the disease *par excellence* which will have to be fought. From blood-examinations of the natives it has been found that over 60 per cent. actually harbor the plasmodium malariæ in their blood, and it is probable that practically all of them have suffered from the disease at some time or another. This experience is on a par with that of observers in other malarial climates, and in view of modern knowledge, it is a fact that is ominous of trouble to come. It has been shown that dwellers in malarial districts gain, as the result of previous attacks and the long-continued presence of the plasmodium in their blood, a kind of immunity which protects them as a rule from further attacks. But with strangers coming to those districts, the case is far different, and the natives, though immune themselves, are a potent source of infeetion to newcomers. The task before the sanitary officials, then, is no light one. If they are to import and keep in health many thousands of laborers, it will be necessary either to destroy the parasites in the natives, or to keep the laborers immune by means of quinine or to destroy all the mosquitoes that could act as carriers of infection. The commissioner most wisely recommends that no steps towards the construction of the canal should be taken till all preparations for the reception of the employes have been made, and chief among these preparations, of course, are the sanitary ones. The solution of the malaria problem, in particular, will be watched with sympathetic interest by this country.—Medical Press and Circular.

Louisiana State Medical Society.

There will be a special meeting of the Louisiana State Medical Society in New Orleans February the 6th to discuss the yellow fever question in all its phases. At this meeting recommendations as to changes in the existing health laws will be submitted to the legislature for its consideration. This call meeting of the society will not interfere with the regular meeting which takes place in May. This special meeting was called because it was deemed advisable to get these recommendations in shape for the consideration of the members of the legislature, which meets in May.

In the spring the eliminative functions do not present their usual activity owing to the torpor and locked-up secretions which have existed during the winter months when the skin neglects its duties and the kidneys are overworked.

If this condition remains neglected, the probable result will be a pronounced attack of rheumatism, neuralgia or grippe in one or another of its forms, hence the necessity of a powerful eliminant is self-evident.

While anti-pyretics and anti-periodics may slightly stimulate the excretions and relieve congestion, thereby controlling certain features of the disease, a complete cure cannot be expected until the poisons are thoroughly eliminated from the system and the diseased organs enabled to resume normal functions.

Tongaline by promoting the absorptive powers of the various glands which have been clogged and by its stimulating action on the liver, the bowels, the kidneys and the skin, will relieve the pain, allay the fever, eliminate the poisons, stimulate recuperation and prevent sequelae.

School of Tropical Medicine.

The trustees of Tulane University, New Orleans, have consulted with the faculty of the medical department of that institution regarding the establishment of a school of tropical medicine in connection with the medical department. From what we learn this department will be established at Tulane University. It is about the only institution where such a department can be practically conducted.

Cystogen-Lithia Tablets.

This effervescent tablet is of interest to physicians as it affords the means of employing the uric acid solvent and genito-urinary antiseptic properties of Cystogen, augmented by the alkaline and solvent action of the lithia salt.

The value possessed by the salts of lithia as uric acid solvent, diuretic and ant-acid are available in this preparation. It is a most happy combination, displaying all of the desirable effects of both Cystogen and Lithia. The effervescence brings about a quick solution in water, producing a perfectly tasteless solution. Water that is too cold retards the effervescence. It may therefore be conveniently taken at meal time in a full glass of water. In cases where this method of administration is contra-indicated, it may be taken between meals, always dissolved in considerable water.

These tablets being effervescent, need to be protected from atmospheric conditions, and for this reason are packed in glass tubes containing one dozen tablets in each. Three tubes are packed in a small cardboard box. A tube may be conveniently carried in the vest pocket, so that patients may be expected to take the medicine with regularity. Samples supplied to physicians on request to the Cystogen Chemical Company, St. Louis, Missouri.

JOHANN HOFF'S MALT AND IRON

(PEPTONATE OF MANGANESE AND IRON.)

Is an ideal preparation to build up

BLOOD AND BODY

(Each wineglassful contains 1 gramme of Peptonate of Manganese and Iron.)

It is a Nutrient Oxygen Carrying Agent

Contains only a minimum amount of alcohol (less than 3%); is more readily absorbed into the circulating fluid than the iron preparation by itself.

Johann Hoff's Malt and Iron is of marked and certain value in all forms of Anæmia, Chlorosis and general debility.

EISNER & MENDELSON CO. of New York,

SOLE AGENTS.

Drop a postal for a free Copy of the Medical Mirror.

If you want to read a journal full of interesting editorials and original matter drop us a postal card and we shall send you a copy of the **Mirror.** The Mirror is one of the most interesting **Medical Journals** published. It is brimful of interesting and instructive matter each month. Our original matter is prepared by men in the city and country practice, and you will find it just the sort of matter you want to read.

Long-winded reports and meatless papers are barred from the MIRROR'S columns. We are really anxious to send you a copy. Write now.

THE MEDICAL MIRROR.

820 No. Grand Ave.

St. Louis, Mo.

The Tarboro Physicians.

On the night of the 31st of January at the Hotel Farior, Tarboro, N. C., about fifty of the leading physicians, citizens and professional men of that city and section assembled to enjoy an elegant banquet complimentary to the physicians in that section of the State, the object being to launch a movement for the enlargement of the Pittman Sanitarium. Dr. Jas. J. Phillips welcomed the guests in a very appropriate address, in which he explained the object of the meeting. Dr. Julian M. Baker gave an interesting history of the Pittman Hospital. Dr. Albert Anderson, of Wilson, was present and made an admirable address on "Hospitals vs. Country Practice." This address was very well received. Dr. Anderson always on such occasions receives, and justly so, the applause of his friends. A Plea to the Physicians for Co-operative Support in Furthering the Aims of the Pittman Hospital was responded to by Dr. Staton. Dr. H L. Clark, of Scotland Neck, made a happy speech on the Medical Profession and Political affairs. Reponses were made by quite a number of prominent medical gentlemen.

Cystogen-Lithia Effervescent Tablets.

The many indications for the use of lithia in combination with cystogen have resulted in the preparation of cystogen-lithia effervescent tablets. Physicians will find these tablets of special value in the treatment of many conditions suggesting the addition of lithia as increasing the efficiency of cystogen. In rheumatism, gout, urinary deposits, ammoniacal urine, cysitis, etc., cystogen-lithia hastens the excretion of urates and uric acid and prevents the formation of calculns. These tablets are composed of cystogen 3 grains, lithium tartarate 3 grains; usual dose, one to two tablets three or four times daily, dissolved in half a glass of water. Samples will be sent to physicians addressing the Cystogen Chemical Company, St. Louis, Missouri.

The Virginia State Examining Board.

At the recent session of the Board of Medical Examiners of Virginia, 108 applicants were examined, one woman and eight negroes being among the number. Dr. Richard Whitehead, formerly the head of the medical department of the University of North Carolina, received his license complimentary. This is a courtesy Dr. Whitehead's friends and the medical profession of North Carolina will appreciate.

Prize Articles.

The Georgia State Sociological Society offers nine prizes, three each on the following subjects, viz:

First: What are the principal causes of crime and best methods of prevention?

Second: What are the primal causes of alcoholism and how best corrected?

Third: What are the defects in our present methods of education in the common schools and colleges and which are the best methods of correcting the same?

Three prizes will be given on each subject. First prize, $15.00; second and third prizes, $5.00 each. Contestants for prizes need not be members of the Society, but must reside in the State of Georgia and treat subject as it pertains to this State except the second on alcoholism which is open for contest without restriction. No article must exceed 2,500 words, be typewritten, signed by a nom de plume with name, address and nom de plume accompanying in a sealed envelopd not to be opened until prizes are awarded. Each prize article is to become the property of the Georgia State Sociological Society and to be read at the annual meeting of the society, May, 1906. The judges are to be disinterested parties and award prizes at least one week previous to annual meeting. All articles must be in the hands of the committee on or before April 15th, 1906. Those desiring manuscript returned must close postage. Address all communications and articles to

DR. R. R. KIME,
Chair. Prize Com.,
No. 509 Eng.-Amer. Bldg.,
Atlanta, Ga.

Dr. R. C. Pearson Dead.

Dr. Robert C. Pearson, of Morganton, one of the oldest and best known citizens in that section of the country, and for years one of Burke county's leading physicians, died Sunday morning, January the 28th. Dr. Pearson was seventy years old. He was a graduate of the University of North Carolina. He served as surgeon in the Confederate Army, where he received wounds which left him a cripple for life.

Advantages of Active Principles.

Hare in Practical Therapeutics says: "If a census could be made of those who die annually from the use of drugs, which are impure or useless from weakness, the writer believes that a most alarming array of figures would be presented. For many years this was unavoidable, because our knowledge of the active principles of drugs was deficient. At present these difficulties have been largely overcome." Speaking of variability in preparations, one sample of tincture nux vomica contained twice as much strychnine and brucine as it should, and had twice as much solid residue. On the other hand, a tincture of nux vomica contained only a trace of alkaloid but had much inert solid residue. "All these disadvantages may be avoided by using assayed goods, or the physician should employ the alkaloids in pill form. A poor drug to the physician is worse than a rusty knife to the surgeon."

Is it not a logical deduction from this arraignment of the usual crude galenics that the active principles should be adopted in the case of every drug where the active principle has been isolated, and if these active principles represent definite and pure preparations, should there not result from their use accurate, definite, constant results?—Albright's Office Bulletin.

If you are interested write for a complimentary copy of Abbott's Alkaloidal Digest, a 300-page review of Alkaloidal Therapeutics, giving much good and thoroughly reliable information on a great number of the active principles with clinical applications. Address The Abbott Alkaloidal Co., Ravenswood, Chicago, Ill. Mention this journal.

The Revolt

By medical men against the American Medical Association bureaucracy. The iniquitous assaults on the medical profession of America, and on the independent medical press. The American Medical Association bureaucracy vs. proprietary medicines and vs. the independent medical press.

In pneumonia warmth is important because cold skin means contracted cutaneous vessels, and this means increased congestion of the pulmonary vessels."

Dr. J. E. Winters to the N. Y. Academy of Medicine.

Antiphlogistine

is the only practical method of applying heat to the chest walls is

PNEUMONIA
PLEURISY
BRONCHITIS

"Completed Dressing",

without frequently disturbing the patient. It depletes the visceral blood vessels by flushing the superficial capillaries —bleeds but saves the blood.

The circulation is thus favorably affected, congestion and pain are relieved, the pulse improves, temperature declines, the muscular and vascular systems relax and rest and sleep usually follow.

DIRECTIONS:- Always heat Antiphlogistine in the original container by placing in hot water. Needless exposure to the air or water impairs its usefulness.

Prepare the patient in a warm room. Lay him on his side and spread Antiphlogistine thick and as hot as can be borne over one-half the thoracic walls. Cover immediately with a cotton-lined cheese-cloth jacket, previously made and warmed. Roll the patient over on dressed side and complete the application. Stitch front of jacket.

Dressing should be made as rapidly as possible.

Never fail to secure full and original packages—Small, Medium, Large, or Hospital Size.

THE DENVER CHEMICAL MFG. CO.
NEW YORK.

In the fierce controversy now raging concerning the relations of medical men to proprietary pharmaceuticals—a controversy which has been made the pretext for an onslaught on the independent medical press by the rule-or-ruin element in the American Medical Association, aided by the Journal and its state journal satellites—the Medical Standard stands unequivocally for the following propositions:

1. That the attacks on proprietary medicinal preparations by members of the American Medical Association, by the "Journal" of the Association, and by the association's Council on Pharmacy and Chemistry, are inspired by men who fail to distinguish between the right and wrong in a system, and hence indiscriminately coudemn the good with the bad.

2. That there are unscrupulous men in the proprietary medicine business, as in all other occupations and all professions; that this unscrupulous element is responsible for medicines which deceive and defraud, and that such medicines cannot be too strongly condemned.

3. That the unworthy and extortionate remedies are an incident of the business, and not a natural product, just as the numerous failures and Shylocks in the medical profession are an incident and not a natural product of medical conditions.

4. That the denunciation of all proprietary medicines because some are bad is as unjust and criminal as would be the denunciation of all physicians because some are knaves.

5. That practically all remedies of merit are proprietary in character in that nearly all are associated with the name of some manufacturer whose reputation is a guarantee of quality.

6. That therefore the essential distinction between so-called "proprietary" medicines and "non-proprietary" medicines is merely in the form of protection the manufacturer may deem most effective in his interest and not in the proprietary principle per se.

7. That a distinctive trade name, chosen by a manufacturer for the protection of a distinctive medicinal preparation, is as legitimate, proper, and, at times, necessary as a distinctive name for anything else.

8. That a proper trade name in the domain of medicine, as in that of foods or other merchandise, far from being "unethical," is the essence of good ethics, in that it serves to protect the owner from piracy, the physician from counterfeits and substitutes, the druggist from being victimized, and the patient from being irreparabiy damaged in purse and health.

9. That whatever will protect the physician in securing precisely the kinds or brands of drugs or preparations he specifies (and this is precisely the protection afforded by trade names), should have his support in justice to his own reputation and to the well-being of his patient, and this regardless of the fiat of men whose devotion to an ethical theory holds all related facts in supreme contempt.

10. That manufacturers, as happily nearly all do, should publish the essential constituents of their preparations as a guide to the physician, though not necessarily the "working formula," or such other specific information as would facilitate piracy; that a trade name should consequently be indicative of the manufacturer or his brand and not of the product itself.

11. That the publication of this information could by no possibility injure any reputable manufacturer while it would serve to destroy the only excuse for the present crusade against proprietary medicines as a class.

12. That the crying need of reform is not so much with reference to proprietary pharmaceuticals as with reference to the "open" drugs and medicinee of the market which are adulterated and degraded to a degree so notorious that medical men have been driven to prescribing reliable proprietary equivalents, even though higher in price, or to specify the goods of some particular manufacturer whose products are, as before stated, equally safeguarded by proprietary protection.

13. That even conceding, for the sake of argument, every charge against the proprietary principle in medicines, the incontrovertible fact remains that the physician has no moral or professional right to refuse to prescribe the drug or preparation he believes would prove of the greatest benefit to his patient, and this regardless of whether it is patented, or whether its name is trade-marked, or whether its exact conposition is given, or whether it is advertised or not advertised either to the profession or to the laity, or whether it is approved or condemned by any association, committee, council, or group of persons acting for themselves or anybody else.

14. That the defamatory attacks on remedies universally prescribed by physicians of all degrees of distinction in accordance with the principle expressed in the preceding paragraph, are a libel upon the medical profession of America, and justify indignant protest against this attempt to terrorize and coerce medical men into obedience to the arbitrary decrees of a medical bureaucracy which aspires to absorb all power over things medical in this country, but which, unless all signs fail, is tottering to its fall before the fires of revolt everywhere evident among the mass of intelligeut practitioners who in this as in other matters feel that their right to think and do as they pleas e according to the dictates of their experience or their conscience must not be infringed by "machine" censorship or threats of "ethical" excommunication.

15. The defamatory policy of the "Journal" of the American Medical Association toward reputable remedies which have defied the ukase of the Council on Pharmacy, and the persistent villification of the independent medical journals which have failed to fall into line with its ideas of medical propriety, are signs of autocracy gone mad. The establishment of branch "state" journals as side lights of the central luminary is clearly designed to rivet the bureaucratic fetters more firmly on the profession by crippling or annihilating the independent medical press.

The ring in control of the Association's affairs is pursuing a course as foolish as it is reprehensible; it can hardly hope to foreclose its assumed mortgage on the intelligence and rights of the medical men of America who have become very weary of dancing attendance on the royal medic l family at the sessions of the American Medical Association, and weary also of relying on the Association organ for such recognition as the said organ in its superlative wisdom may deign to bestow.

The Medical Standard replies to the "Journal" and "state journal" propaganda of the past year with a paid subscription list showing a larger increase for 1905 than in any previous year in its history and with a larger line of high-class advertising than ever before. For 1906 it has every prospect of unprecedented development.

The Medical Standard long ago announced its independence; it meant it then, and it means it now. —From the Medical Standard.

The "Venal" Medical Press.

What is all this ado about the sinfulness of publishing advertisements of proprietary medicines? My Faith! to read the late issue of the California State Medical Journal one would think the medical editors were nothing but a pack of mercenary knaves. It is "venal" we are and "subsidized," sunk, indeed, in the lowest depths. And the J. A. M. A., too, has been pounding along in the same

Recovering from Typhoid

The patient's strength is exhausted, his tissues wasted, and a relapse feared if the digestive organs be not spared all unnecessary strain.

BURNHAM'S CLAM BOUILLON.

Burnham's Clam Bouillon

(Absolutely Free from Any Preservative)

offers an ideal tissue-building and stimulant food which places the least strain upon digestion. The fact that BURNHAM'S CLAM BOUILLON is sterilized and is partly predigested makes it especially fit for use in typhoid fever convalescence. The results are: grateful patients and rapid strides towards the restoration of vigor and health, without any fear of a relapse due to a dietetic error.

Physicians cannot make a mistake in prescribing BURNHAM'S CLAM BOUILLON in typhoid convalescence. It is bottled in glass, being sold in pints and half-pints. This assures not only cleanliness and convenience in the serving, but perfect purity and freshness while using in the sick room. All the leading apothecaries and grocers sell it.

E. S. BURNHAM CO., Manufacturers and Packers, 53 to 61 Gansevort St., New York.

lines and roundly denouncing all prescribers of those nefarious concoctions. But mark you, the smell of fire is pretty strong on their own garments, for their advertising pages tell their own tale. Proprietary medicines, which no doubt are very good, are there advertised and their formulae, too, are given, but in a more or less indefinite way, a way that would be confusing to a compounder and certainly so to the majority of prescribers. The publishing of these formulae makes the articles none the less proprietary nor does it detract from or add to their efficacy and, if there be a sin in publishing these advertisements, we fail to see how the giving of these quite indefinite formulae removes the curse. But, according to this pricker of consciences and rattler of dry bones it is sinful, it is "venal" to publish these advertisements. Further, by pursuing our "venal" ways we are upholding the Arch Enemy in his works to our undoing and the lasting disgrace of the profession. Perhaps we are, but we cannot believe the men who give character to the majority of the medical journals of this country, Canada and Great Britain are "venal," are "subsidized" and debauched by the manufacturers of proprietary medicines. We do not believe that the California State Journal really means what it says or is mortifying itself to any great extent for its own sins. Neither do we believe that it is wrong to carry advertisements of these articles of merit, for such many of them are; nor do we consider it an unpardonable sin to prescribe a proprietary remedy when it will do what we want of it and is more convenient and palatable than anything we could have compounded, prescribed we never so beautifully. While we like the old drugs to which we have grown accustomed, there are times when the newer preparations, even though proprietary, are as a haven of refuge, "a rock in a thirsty land." It is then we have prescribed them, have gotten desired results and have felt grateful to the journal whose pages informed us of the remedy. Yes, we have prescribed proprietary medicines and expect that we may do likewise in the future, that too, with a clean conscience, and, "Tell it not in Gath," we have even prescribed "Peptomangan" and gotten results when the tincture of the chloride of iron could not be tolerated, useful as that time-honored remedy is and, worse, if possible, we have given "Fig Syrup" to babies and nervous women when official preparations for one reason or another have not given satisfaction. We do not believe in habitually prescribing proprietary remedies, as it encourages slip shod methods of thinking and prescribing just as surely as does the prescribing or dispensing of ready-made tablets or mixtures, excellent though they may be, but there are times when they "fill the bill" to a nicety and it is then we believe it our duty to the patient to prescribe them. This we know will bring down disapproval from many and honest disapproval, too, from some, but will it all be honest or do people forget their shortcomings? It is not very long ago that we listened to a paper by a distinguished gentleman anent the subject of proprietary preparations. In this, he took occasion to roundly denounce all physicians by inference who would prescribe, for exampie, any preparation in a long list which he read. We were, as he proceeded down the line, feeling very small indeed, for we had been guilty, until a certain preparation was mentioned, then our spirits rose, we were sure he did not mean all he said or else he had suddenly reformed, for it was only a short time previous that we had the privilege of reading a prescription written by the essayist which called for this preparation. The gentleman had honestly prescribed this preparation and the patient averred that it had greatly benefited him, why, then,

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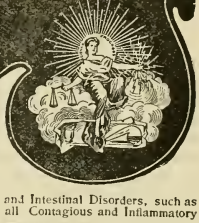

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The Board of Health of New Orleans.

The Governor of Louisiana has appointed a new State Board of Health with Dr. Clifford H. Irin, of Bossier Parish, as president. New Orleans has usually furnished the president of the Board of Health. It seems that the Governor has changed his policy in this respect and has elected a man from the northern part of the State, believing that the country physicians will help to restore the confidence among the health authorities in Louisiana and adjoining States. Dr. Souchon, the former president of the Board of Health of that State. with the other members of the Board, resigned their positions at the close of the recent yellow fever epidemic and this new Board recently appointed takes their places.

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We wish to refer to a comparatively new combination of drugs, one which has been used largely for the control of cough and which has also been employed to a great extent for the relief of pain. It is claimed that its use in many cases renders the same service as does morphine, its influence often lasting for as long a period of time, and possessing the advantage that it doee not disturb the digestive tract, nor cause constipation or habit. The remedy we mean is Antikamnia & Codeine Tablets. In several instances in which the patients were suffering from severe acute sciatica, it was found that they acted most satisfactorily. Each tablet contains 4½ grains of antikamnia and one-fourth grain codeine sulphate. The prompt and excellent result obtained with this preparation is due, in a great measure, to the specially refined and purified codeia which The Antikamnia Chemical Company employs in these tablets. Impure or ordinary codeine irritates, constipates and depresses, and to avoid this, the said Company purifies its codeia by a special process, and this should be remembered by the physician when prescribing codeia. In treating a case of sciatica, one tablet was followed by a diminution of pain, and after the third tablet, given in half-hour intervals, the pain entirely disappeared. The usual dose is one tablet every two, three or four hours, according to indication.

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Intestinal Antisepsis: Its Theory and Application.

The Medical Record of Oct. 21, 1905, under the above caption, and digesting from the Alkaloidal Clinic, says: Dr. W. C. Abbott claims for intestinal asepsis the reduction of the number and potency of the pathogenic bacteria in the intestine by the use of appropriate remedies, not the rendering of the canal entirely aseptic, a thing that is manifestly impossibie. The debris of ingested food becomes, in deranged condition of health, a nidus for the growth of germs. In most acute diseases food is not assimilated, the body chemistry is deranged, and the intestine becomes full of fermenting material ready for the growth of germs. Poisons are absorbed along the course of the intestine, and produce their toxic effects. Constipation causes this fermenting mass to remain in the bowels, or a part is rejected, leaving plenty behind in the folds and pockets of the intestine.

The first thing to be done to render the intestine less septic is to remove as much as possible of the contained material, by the use of moderate doses of calomel. This at the same time stimulates the intestine and the liver, and causes the peristaltic action of the bowel to be encouraged. A saline is then given, causing the excess of serum to be poured out, and the stomach and intestine are made clean for the action of the sulphocarbolates, which are inimical to all germs, while at the same time not harmful to the most delicate membranes. Those used are the sulphocarbolates of zinc, lime, and soda, separately, or in combination. Under their use hyperpyrexia lessens, tympanites and foul tongue pass away.

Digestive and febrile diseases of all kinds should be treated in this way. The sulphocarbolate of zinc may be given one grain, repeated every half hour to two hours, gradually increasing to 5 grains at each dose. Even two drachms in 24 hours may be taken without harm. When they have had the desired effect the stools are no longer black from bismuth combined with the sulphocarbolate, but take on a gray and then a normal brown color. The zinc is more astringent and antiseptic, the soda more antacid, while chronic cases with cachexia find the lime salt act as a tonic nutrient.

The sulphocarbolates are very soluble, and hence are most useful. Assimilation soon begins to improve, and the microscope fails to find bacteria in the stools. Absorption occurs, not to poisons, but of properly digested foods. Opiates and anodynes in such cases only lessen the pain and do not do away with the poisoning.

The Charlotte Medical Journal.

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The Infant and its Care.

By H. L. Appleton, M. D., Gadsden, Alabama. Ex-President Tri-State Medical Society Alabama, Georgia and Tennessee, and Etawh county Medical Society; M. A. M. A. State Medical Society of Alabama.

The Infant is the Plant of the Nation, and to bear this Plant should be the highest desire of a mother, for in doing so she is fulfilling the mission the Creator intended for her.

Some one said a long time back the hand that rocked the cradle controlled the world. If this be true, and a fact it is beyond contradiction, then the man should exert every means to select a healthy woman with no hereditary taint to be the mother of his offspring. On the other hand the woman who expects to take a part in performing the act of putting her child on the world to compete for honors that is to be the pride of her old age, should lay aside sentimentality, and cast her admiration on nothing but a perfect man, in body, mind and *morals*. For among the species of all living creatures, none have the rank of man's gradation of earthly existence, and yet when first loosened from his moorings, and his frail bark is pushed to the wind of time there is none so helpless, feeble and dependent. Left to himself he would soon pass away, without the loving care of parental regard he would be like the dewdrop before the morning sun, his physical wants must be immediately supplied, his latent powers must be developed and strengthened, until from a helpless insignificant being he is transformed into one fully adequate to make provision for himself, and eventually for those who may be dependent upon him.

In this helpless condition, unable to care for itself, or provide one single necessity to begin a future or to ward off harm in any shape, how soon would the flickering lamp of life go out forever. Unless some careful hand is extended as it comes from the workshop of its maker into a life of usefulness or of shame and disgrace, for such is the fate of each one born.

This hand that is to administer to the needs of the infant form so tender and delicate should be at least intelligent. For without this aid it no sooner enters the world and opens its eyes on life's morn than it shuts them again and makes its exit out of time; ere the sun of life has risen. It must be clothed, and fed, and cared for by loving hands, and watchful concern.

Here its future is shaped. How often is there required the utmost care and attention to fan into life and conscious existence the almost lifeless form. Should there be a single obstruction, the slightest interference in the operation of the machinery of nature, how soon would there be a complete stopping of the wheels of life? How momentous, then, the trust confided to those into whose hands this frail and helpless object is placed. How important that they should take cognizance of nature's laws; their every aim should be to assist nature in fostering this tender plant that is created for the temple of its Creator, they should never do anything to counteract natures manifest tendencies. If the mother is acquainted with the fundamental principles of natures constitution, if she has an unwavering confidence in the provisions of nature to meet every emergency, and consults these oracles as an infallible guide, then we may anticipate no difficulty in the outset. Propitious winds and fair tides give the infant voyager a fair and promising start on the great Ocean of life.

But if on the other hand ignorance reigns supreme, in both father and mother, there is a want of confidence in natures laws to provide, and a blind reliance upon the nostrums and contemptible prescriptions of ignorant old women and quack nurses, of which I am sorry to say the world is too full.

Then God pity such an unfortunate one. For there can be no anxiety like that of the young mother, who for the first time clasps her new-borne babe to her breast that is yet heaving with the struggles of bringing it into the world, yet knows not how to administer to its wants. Its at this point when she needs the advice of an honest family physician. This is the starting point for a good or bad constitution. A sound one should be the aim of the parents, for in a healthy offspring is the foundation of usefulness and a happy life, and when parents neglect this they not only fail to discharge the duty they owe their children, but to society and generations to follow. It is the duty of parents to become more thoroughly acquainted with the duties involved upon them of raising a family so they may guard against any tendency toward agents that may produce disease in body or mind. Statistics tell us about one-half of the children born die under twelve years of age. This is supposed by some to be a natural evil, for the Lord giveth and the Lord taketh, blessed be the name of the Lord. But upon careful examination we find it to

be a case that does belong to the Lord but one that arises from improper nursing an injudicious mode of treatment when a child appears a little sick. How often have we, as we stood by the bedside of a bright star of the household whose little light flickering for the last time, heard the occupants of the room, with a long drawn sigh, dwell on the mysteries of Providence; in snatching from the arms of the fond mother, the center of her fondest and most affectionate hopes, the babe that is bound by the tie of parental affection! when if they only had a chart of all that had been done for the poor helpless one that could not raise its hand in open objection, they would see at once that Providence had no hand in such a course. In my humble opinion its nothing but high handed blasphemy, to be guilty of accusing the giver of such blessings, of tearing from a loving mother her babe that was intended to be raised by well established laws and it is a deviation from these laws that cause so many of our infants to find an early grave. The blame should be put on the ignorant nurse and parents, who so willingly disregard the laws of nature and pour everything down the little fellow without knowing what is the matter, even denying the parched lips to be dampened with cold water, natures greatest febrifuge.

The child of course dies and then you again hear the same expression in an attempt to console themselves, God gave and it is He that taketh away. I have seen mothers too proud to care for their babes, and refuse to allow it the breast, turn it over to the negro and bottle. I am sure here is the cause of many starting points for disease and crime, too many of our children are raised by proxy. I am satisfied there are conditions under which a mother has a right for the welfare of her offspring to raise it artificially, and I am sure the child is much better off. The diseases of children are generally acute and delays are dangerous.

The general opinion that the diseases o children are hard to discover and difficult to treat is a mistaken idea. They are by no means difficult; it is true they can't tell where they hurt, neither can they mislead you by talking.

I have met with far greater success in the treatment of children than adults. After the child is delivered it should be turned over to the nurse with positive instructions to cleanse well the eyes. The cord well tied and tenderly dressed with a loose band to hold same in place, all rough handling should be avoided. A careful inspection by the doctor should be immediately done. Dress; nature knows no other use for clothes than to keep warm. The clothing should be simple and free from starch and pins After this function is performed the child should be put to the breast, nature not only points out the proper food, but prepares same.

It is true the mothers milk does not always come immediately after birth, but this is the way to bring it, besides the secretion from the breast are of a benefit to the new born.

Bathing is one of the most neglected of all among the lower, or poorer class, and sometimes among the higher. An infants skin should be kept perfectly clean by its morning bath of tepid water, and as it gets older make it colder.

Sleep is natures greatest boon. Infants can not sleep too long, for this is the support granted them by nature. An infant lives faster than an adult, the blood flows faster. Sleep promotes more uniform circulation and facilitates more assimilation of the nutrient received.

It is at this stage in the absence of sleep that mothers unconsciously lay the foundation for habits that will be to their ruin by producing sleep with Godfrey's Cordial, Batman Drops, Mrs. Winslow's Soothing Syrup, Paregoric and Co. With these hell brands in the hands of ignorant mothers no wonder our asylums, chaingangs, and prison houses of prostitution are filled to overflowing. Until the family physician is thoroughly aroused to his sense of duty along this line the infants of our country will still be doped and from a theological standpoint be damned.

Crying is injurious to the young infant, and very annoying to a tired parent, but the patent medicine had better be left off so in after years you will not have to spend so much time on your knees trying to reach the Lord with your homemade convicts. If you want healthy infants you are compelled to guard both the mouth and anus. Next to patent nostrums and old women comes the nursing bottle and syringe, one with its microbes, the other with its rectal tubes and high aneamas. The recording Angel can only tell by which route they have been sent in the fastest.

The Treatment of Gall Stones.

By Chas. G. Hill, A. M., M. D., Physician in Chief to Mount Hope Retreat and Mount St. Agnes Hospital; Professor of Nervous and Mental Diseases, Baltimore Medical College.

Functional disorders of the biliary secretion may be primarily divided into three forms—a morbid excess, a morbid deficiency, and a vitiation of the bile. A morbid excessive secretion of the bile may exist theoretically, but there is little or no evidence that it ever produces any serious

symptoms, for, provided that the bile ducts are open, any excessive quantity will be eliminated into the intestine after meals, and the only pathological effect that might take place would be distention of the gall-bladder between the periodic emptying excited by food. This might produce diminished contractile power of the walls of the bladder followed by stagnation of the bile in the gall-bladder and the consequent formation of stone. Considering the chemical constitution of the bile, on leaving the liver it contains only about 2.5% of solid matter, while under normal conditions the gall-bladder absorbs a large proportion of the water, at the same time excreting mucus, pseudomucus and chocholesterin, thus raising the solid matter to about 18%.

From this it would appear that nature had provided a very efficient preventive to excessive quantity of bile producing morbid conditions.

Deficiency of bile, often described as torpor of the liver, is a much more common condition, producing morbid processes, which the physician meets almost daily in general practice. The function of the bile s both excretive and secretive and consequently, if the formation is insufficient, two conditions will result, failure of excretion will embarrass the liver and will affect the digestion and absorption from the intestine, more especially the absorption of fats. It is certain also that at the same time vitiation of the bile formed also takes place. The active principals of the bile are the bile salts, glycocholate and taurocholate of soda, which hold in solution the excretory products, the cholesterin and coloring matters. Crofton has recently shown that glycocholic acid can be formed by the action of trypsin upon hemoglobin in the presence of glycogen or glucose, and suggests that the bile salts are formed in the liver by the action of trypsin or trypsin-like ferment upon the hemoglobin in the presence of glycogen. That the bile acids are of special importance are shown by being reabsorbed by the intestine, so as to be reutilized in the excretion of bile. Prevost and Binet, Rosenberg, Lewaschaut, Nissen, Rutherford, Noel Paton, Pfeiffer, and many others, have shown that the so-called cholagogues of the pharmacopœia do not increase the quantity of bile, though salicylic acid and turpentine appear to have some slight effect, and further that bile salts are the only drugs which will increase the quantity of excretion.

Gall stones are of very great frequency, often producing severe symptoms. Kehr's statistics show that ten per cent. of adult persons in Germany are so afflicted, in England about five per cent. and judging from the Johns Hopkins autopsy reports about 7½ per cent. in this country. In many cases, no doubt, the gall stones lie dormant in the bladder and give rise to little or no trouble, but a proportion of cases suffer from remittant hepatic colic and others from occlusion of the gall duct, causing very serious results. Heredity is said to be an etiological factor in the formation of gall stones, but apparently on insufficient grounds. They have occasionally been found in the new born. 2.4 per cent. of the cases occur under twenty, 3.2 per cent. between twenty and thirty, 11.5 per cent. between thirty and forty, 11.1 per cent. between forty and fifty, 19.9 per cent. between fifty and sixty, and 25.2 per cent. over sixty years of age; they may be said to occur in one out of every four persons over sixty, due to the increased formation of cholesterin and the decreased expulsive power of the gall-bladder. Diet is said to be a cause. Mayo Robson and Brockbank regard a supply of nitrogenous food as a preventive, arguing that the bile acids are formed from proteids. In opposition to this theory is the extreme rarity of the disease in India where the people are vegetarians. From Crofton's experiments it would appear that carbohydrates which produce glycogen are at least as important as nitrogenous food. Water containing lime has been accused because the ealcium salts of bilirubin are the principal contents of a form of stones. But the addition of lime water to bile in quantities does not precepitate bilirubinate of calcium, provided there is a sufficient quantity of glycocholate of soda to hold it in solution; nor has it been proved that gall stones are more frequent in districts where the drinking water contains a quantity of lime salts; and further, the Carlsbad waters, which have admittedly a curative effect upon gall stones, contain a considerable quantity of lime. One cause of gall stones, no doubt, is stagnation of the bile in the gall-bladder, especially when there happens to be an infection. The bile under these conditions becomes thick, viscid, and ropy. Solids are formed, which, acting as foreign bodies, become coated either with cholesterin or bilirubin salts. It is not improbable that in many cases the nucleus of the stone is mucus, as the hollow in the centre of the stone is usually empty, though in a certain number of cases it contains the Bacillus coli communis or the Bacillus typhosus. It is obvious, however, that if there were a sufficient quantity of glycocholate of soda and of water the precipitation of cholesterin or calcium salts could not take place. There seems to be some connection between worry, excitement, anger, etc., and the secretion of bile as well as its elimination; anger and fear have been the immediate cause of an

attack of jaundice. A dog in the writer's possession fought for some time with its companion shortly after eating, and in a few hours developed a severe attack of jaundice. It is well known to grey-hound trainers that if the dogs take violent exercise after eating they are apt to develop jaundice. The pathology of this appears to be that the gall-bladder is full, awaiting the passage of the food from the stomach, and that the violent exercise forces the gall back into the liver, thence by the lymphatics into the blood. In melancholia gall stones are the rule, in mania they are practically unknown. Out of 243 autopsies there was not a single case of gall stone in maniac cases, while in the melancholias all had a pathological condition of the gall-bladder and in the large majority of cases gall stones were present.

It is curious that gall stones may remain in the gall-bladder for years without migrating into the duct or causing any trouble. As a rule the attacks occur at night and are preceded by severe pain in the lumbar region, probably in many cases brought on by distention of the gall-bladder, which causes nature to make an extra effort at expulsion. If the patient had taken a supper before retiring the gall-bladder would not have become so distended, having emptied itself by the normal stimulation of food. Stooping for any length of time also appears to bring on an attack. Besides hepatic colic, gall stones seem to have some connection with primary cancer of the gall-bladder; also they may set up an inflammation which ends in a fistula usually into the duodenum or colon or through the diaphragm, in the latter case causing the patient to expectorate bile. Many nervous symptoms are produced by the heavy dragging sensation produced by a distended gall-bladder with stone which, if not recognized, causes the patient to be classed as a hypochondriac and to lose the sympathy of both his physician and his friends. Pregnancy and tight lacing probably account for the greater number of gall stone cases among women than among men, the proportion being stated as five to one. Pregnancy cannot be avoided, but tight lacing can and should be condemned by the physician; both probably cause a reduction of the action of the diaphragm, free action of which helps to empty the gall-bladder. In the treatment of gall stone the surgeon seems to have usurped the place of the physician, the latter seeming to acquiese without an effort. But the operation is dangerous and often has to be repeated. In the most simple form of operation, opening up the gall-bladder and evacuating the stones, etc., the mortality is probably a little over one per cent., but this operation is no guarantee against the return of the trouble, nor does there seem to be any reason why it should, the cause of the difficulty being the precipitation of cholesterin and pigment salts, and emptying the bladder cannot possibly affect a pathological chemic condition. Kehr performed 409 operations on 353 patients, showing that one in fifty had to be operated upon more than once. In the more elaborate operations the mortality is from 5 to 25 per cent.

The operation is, therefore, a very serious one and should not be recommended except under very severe conditions.

Typhoid fever, influenza, malaria and many other diseases are associated with a torpid condition of the liver in which the conjunctiva becomes slightly yellow, especially after any extra fatigue; the skin is of a dirty yellowish hue and the general appearance is that of a pseudo jaundice, the patient suffering from want of energy and mental depression. In these cases bile pigment will usually be found in the urine, not perhaps in a sufficient quantity for gmelins test, but by diluting tincture iodine with ten volumes of alcohol and using it as a layer test, at the junction of the two fluids there will be a faint or deep green ring according to the amount of pigment present. Bunge in his recent work states that every form of jaundice is due to the obstruction of the flow of bile and that so long as there is an unimpaired flow of bile into the intestine there can be no bile pigment in the urine; it follows, therefore, that should bile pigment be found in the urine, even in very small quantities, the therapeutics of the physician should be directed to the elimination of bile. On physical examination the liver will be found to be more or less enlarged while on inquiry it will be found that there is a distaste for fat on the part of the patient, due to a probable malassimilation. Such a condition predisposes to the formation of gall stones as well as to chronic constipation.

The treatment of this condition should have for its object the increase of the quantity of bile, and also of the glycocholate of soda, in order to hold the excretory components of the bile in solution and at the same time stimulate the gall-bladder to empty itself as often as possible so as to prevent stagnation.

To obtain these results a purge of calomel and soda should be given occasionally to relieve the intestine of undigested food and possible toxins which may accumulate, at the same time the patient should drink a large tumbler full of water containing five grains of sodium bicarbonate about half an hour before meals and an injection of a litre

of normal salt solution every other day, well up into the colon, will be of great assistance. To increase the solvent powers of the bile, five grain capsules of sodium glocccholate mass three times a day after meals will have the desired effect; in cases where stone is already present or suspected, the dose may be raised to ten grains. This drug occasionally causes nausea for the first day or two, which passes off if the patient continues the treatment. The diet should be abundant, consisting principally of carbohydrates, but not excluding meats; the meals should be taken at regular hours, the last about an hour before retiring. Exercise is an important aid, as the free and full action of the diaphragm materially assists the gall-bladder to empty itself, but if gall stones are present it must be used with discretion. Many of the pains radiating from the region of the gall-bladder are due to adhesions which can only be relieved by operation, for as the adhesions interfere with the contractions of the gall-bladder, they have a tendency to cause stone formation; in these cases, therefore, an operation is indicated. Chronic constipation is often caused by torpid liver and by insufficient excretion of bile; in such cases the treatment just described will be found to give relief. It seems probable that by the administration of glycocholate of soda between the acute attacks of hepatic colic, not only will the formation of stones be prevented but those already formed will be dissolved, preventing the recurrence of the attack. During the acute attacks or when there is complete occlusion of the gall duct, shown by acholic stools, the bile salts are not only not indicated but contraindicated, it being evident that to increase the quantity of bile at such times would increase the jaundice, but if the gall duct is open, and especially if bile pigment is present in the urine, the treatment here outlined is indicated.

Some Fractures of the Skull.

By R. H. Powell, M. D., Superintendent Grafton City Hospital, Grafton, West Va.

In no field of surgery are the results more brilliant than those following operations for fracture of the skull, and none more gratifying to the surgeon than the knowledge that he has saved a life which otherwise would have been sacrificed.

Fractures of the skull are important to the general practitioner, not only on account of their frequency but also by reason of the fact that he must in many cases institute the proper treatment without delay, if the life of the patient is to be saved. Therefore, little time for consultation, or opportunity to take the patient to some hospital, where the surroundings are more favorable, are afforded, although many cases may be transported without material danger.

In many cases where an injury to the head by direct violence is followed by unconsciousness, even for a short time, the hair should be clipped or shaved, and the skull examined carefully for any evidence of fracture. If no evidence of fracture is found, the patient should be placed in bed and kept perfectly quiet for at least forty-eight hours. If at the expiration of that time he remains well, he may be permitted to sit up, but should be kept under observation for two or three days longer in order to determine whether any serious results follow. Should fracture be discovered, although there be no evidence of compression of the brain, the patient should be immediately prepared for operation, even though the physician should not be prepared to perform it himself. The patient's head should be shaved completely and washed with bichloride of mercury 1-1000. If the fracture be compound, the wound should be irrigated with sterile water or normal salt solution, loose fragments of bone, hair and dirt being removed by carefully sterilized instruments, and the stronger bichloride solution prevented from gaining entrance to the membranes of the brain by covering the wound with sterile gauze, while the stronger bichloride solution is used on the remainder of the scalp. The gauze should then be removed and fresh gauze, saturated with sterile salt solution, applied before the weaker bichloride dressing is put on. No iodoform or other dusting powder should be used. A moist bichloride dressing, 1 to 3000, should then be applied, and over all oiled silk or some impervious covering applied to prevent evaporation. If now it is desired to remove the patient to more desirable surroundings for operation, he will be in much better condition for operation than if these preliminary preparations had not been carried out. Failure to do this will unnecessarily jeopardize the patient's chances for recovery. If, on the other hand, immediate operation is considered advisable, the patient will have been prepared while the necessary preparations for operation are being made.

The following cases which I report have occurred in my own general practice or in consultation with other physicians to whom I am indebted for some of the important features of each case.

Case 1.—E. B.; male, age 23. Fell from railroad bridge, striking head on projecting timber, sustaining an extensive compound fracture of frontal bone. The surroundings were exceedingly unsanitary. There being no place to take the patient, I decided to

operate in spite of difficulties, cleansing the wound and removing fragments of bone, hair, cinders and dirt. Upon elevating what appeared to be a depressed portion of skull, I found that that portion of the skull on which I rested the elevator for a fulcrum itself to be elevated, the fragment extending well around to the parietal bone. The case passed into other hands for subsequent treatment, and died at the end of a week of septic meningitis. In the passing I may observe that had this case been more favorably situated, and proper subsequent treatment carried out, recovery could have confidently been expected.

Case 2.—G. M.; male, age 56. While intoxicated, jumped from a moving train, striking his head against the corner of a cross-tie, fracturing nasal and frontal bones and orbital plate, opening the frontal sinus, and also suffering an extensive linear fracture extending upward through frontal bone, exposing dura with escape of brain matter. In this case I was compelled to operate by the light of two lanterns and a lamp without chimney under the poorest of sanitary surroundings. Fragments of bone were removed and compression relieved, but patient died with symptoms of acute cerebritis on fourth day. This case shows the adverse conditions with which the general practitioner has to contend quite often, and use the means at hand to save life.

Case 3.—Occurred in the practice of Dr. J. E. R. Ellis, of this city, whom I assisted. Male patient, age 35. Extensive compound, depressed fracture of occipital and parietal bones, resulting from railroad injury. Operated on in private boarding house with unsatisfactory surroundings. Bone fragments were removed and depression relieved, but patient died in six days of septic meningitis.

Case 4.—H. S.; age 34. Injured in a fight. I did not see him until evening of third day when I found him with a temperture of 102.4, pulse 120 and somewhat delirious. Pus was discharging from wound just above left eye, the eye-lid was discolored and swollen with subconjunctival ecchymosis. Again I was compelled to operate under great difficulties. Several fragments of bone were removed, over a space the size of a silver dollar, together with portions of the supra ciliary ridge and orbital plate. For two days the patient's temperature remained elevated, gradually falling to normal, with more or less delirium meanwhile. Recovery followed a prolonged convalescence in which a number of necrosed fragments of bone escaped at intervals, finally healing perfectly with complete recovery. Double vision continued for some time as result of injury to anterior attachment of superior oblique muscle.

Case 5.—R.; male, age 28. Was thrown nearly fifty feet by explosion of saw mill, alighting on head and shoulders. There was fracture of vault and base of skull with pulsating arterial hemorrhage from right ear, and hemorrhage from nose and mouth. Subject died without operation in four hours.

Case 6.—M.; age 14. Was thrown from horse. Found him unconscious, with pulse 50, temperature normal and without external wounds; remained in semi-conscious condition for four days, parents refusing immediate operation. A hæmatoma developed, gradually increasing, although the signs of compression were not absolute. At operation, a linear fracture was found without depression, extending antero-posteriorly across parietal bone. A bleeding point confirmed the diagnosis of linear fracture with rupture of a small branch of middle meningeal artery with extra dural hemorrhage, and escape of blood beneath the scalp between fractured margin of bone. A small opening was chiseled through skull, the artery secured and a few small blood clots removed. With the exception of stitch abscesses due to lack of thorough aseptic technique, the patient made a rapid recovery. By way of comment it may be noted in this case that there was an immediate change of pulse from 54 to 80 as soon as the skull was opened.

Case 7.—S.; male, age 48. Fell twenty feet from scaffold, striking on head and shoulders, sustaining fracture at base of skull and dislocation of atlas; lived about fifteen minutes, respiration ceasing fully five minutes before pulse ceased to beat.

Case 8.—L.; male, age 22. Was injured seventy-five miles by rail from hospital and brought here by Dr. Perry Bosworth, of Huttonsville, twenty-four hours after receiving injury. Patient conscious but stupid, pulse 55 and temperature normal. On operation a compound depressed fracture of parietal bone was found above and posterior to ear. About one ounce of brain matter escaped. After careful removal of all spiculae and fragments of bone, the wound was irrigated with hot normal salt solution and wound closed with cat-gut drainage. Patient was discharged in eleven days fully recovered. Was advised not to resume work for two weeks but went to work immediately upon his return home and has remained in perfect health ever since.

Case 9.—R.; female, age 5 years. Case sent to hospital by Dr. Perry Bosworth, of Huttonsville, W. Va. On admission to City Hospital, thirty-two hours after receiving injury, patient was conscious, with temperature of 100 and pulse 120. An

immediate operation was performed, in which an extensive compound fracture of frontal bone was disclosed, extending from margin of hair to supra-ciliary ridge, with fully one-half inch depression. Little difficulty was experienced in elevating the bone, and after careful flushing with hot normal salt solution the wound was closed with cat-gut drainage. As we had anticipated there was some suppuration but at the expiration of two weeks the wound had healed with the exception of a small granulating surface and the patient allowed to return home with subsequent complete recovery.

Case 10.—R.; male, age 38. Was called in this case in consultation with Dr. J. F. Chenoweth, of Simpson, W. Va. Patient was thrown from buggy against railroad trestle, alighting on hips and side, sustaining a comminuted fracture of left ilium and fracture at base of skull. There was hemorrhage from left ear and mouth, with ecchymosis in occipital region. This patient lived six days, remaining unconscious during entire time.

Case 11.—H. C.; age 35 years, weight 210 lbs. Fell twenty-five feet, striking on head and shoulders. There was slight abrasion of face and scalp. Pulse 50; respiration, stertorous; unconscious, hemorrhage from right ear and from nose and mouth with sub conjunctival ecchymosis. The patient remained unconscious for eighteen hours, gradually regaining consciousness and final recovery. There resulted paralysis of right side of face and deafness in right ear for about six months with occasional discharge of pus from ear which still continues, together with occasional attacks of vertigo and feelings of discomfort.

Case 12.—R.; male, age 17. Was struck on right parietal bone with a small stone. He became unconscious for a short time but rallied and walked home and remained apparently well until about ten hours after receiving the injury, when he suddenly became unconscious and died in four hours with symptoms of compression of the brain. A post-mortem revealed a large extra-dural clot in left parietal region, without fracture, the hemorrhage resulting from rupture of a branch of the posterior meningeal artery.

Case 13.—We have at present time case of fractured skull in the City Hospital, extending from right parietal region just posterior to ear where there was extensive depressed fracture 2 inches in diameter with a linear fracture extending anteriorly and continuing transversely through the frontal bone and left parietal bone to a point just anterior to and above left ear. In this case the depressed bone was elevated in right parietal region with removal of fragments and a trephine opening made to left of median line in frontal bone in order to check the hemorrhage, coming from longitudinal sinus which was very profuse. At this, the end of the fourth day the patient's temperature is normal, pulse 80, and gives promise of rapid recovery. The stitches were removed on the morning of the fourth day, and incisions were healing by first intention.

Later.—On eleventh day after operation, the patient had recovered sufficiently to return to New York City, accompanied by his brother.

The cases submitted have been selected out of a large number, no preference being given those resulting favorably as against those with an adverse outcome, the object being to the end that in a given number of operations the practitioner can not hope for uniformly brilliant results, but must remain content with a fair average of success. In reviewing the cases given, it will be observed that the fractures at base of skull were invariably fatal, except in one subject whose early return to consciousness and rapid improvement was a favorable indication. In certain other cases that recovered, considering the extensive injury and marked depression of brain, it may be remarked as a favorable indication that unconsciousness did not exist except for a short time immediately following injury. The cases proving fatal were operated on under the most unfavorable surroundings. The per centum of recoveries, however, will compare favorably with the average general record for operations in compound fractures of the skull.

Epilepsy.*

By Cassius Dudley Mansfield, M. D., President Powell County Kentucky Medical Society, ex-Secretary of the Powell County, Kentucky Medical Society, Chairman Powell County Kentucky Board of Health, ex-Secretary and Founder of the Kentucky Valley Medical Association, ex-2nd Vice-President of the Kentucky State Medical Society, ex-2nd Assistant Physician at the Eastern Kentucky Asylum for the Insane at Lexington, Ky., ex-3rd Asistant Physician at the same Institution, ex-Member of the Fayette County Kentecky Medical Society, Medical Examiner for the New York Life Insurance Co., Equitable, Fidelity, Mutual, Aetna, Prudential, Citizen's Life, etc., etc., etc., Stanton, Powell County, Kentucky.

Synonyms, Morbus Sacer—Sen Comitalis.

Aetiology—Epilepsy is a peculiar disease of rather frequent occurrence. The main symptom of which is paroxysmal loss of consciousness with convulsions that are

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either tonic or clonic of one limb or of several, or of the whole body. In typical cases the unconsciousness is associated with violent general convulsions, but there are many anomalous and rudimentary forms of epilepsy without any symptoms of motor irritation. Genuine epilepsy is a functional neurosis. It is also true that attacks similar to those of the genuine seizures, not infrequently occur in the course of tumor, syphilis, injuries, etc. But such attacks are merely symptomatic. Of the actual causes of epilepsy, we know absolutely nothing that we can verify. We are acquainted only with certain factors which are favorable to the development of the disease, and are to be regarded therefore as predisposing or exciting causes. Heredity is decidedly the most important of these, about forty per cent. of all the cases that the general practitioner meets up with occur in persons who have inherited a nervous diathesis, and one or more of whose blood relations have suffered from diseases of the nervous system. It should not be understood that we must find other cases of genuine epilepsy in the same family to establish heredity, the question is merely whether the ancestors have exhibited a general tendency of nervous disease. I know of one mother in this county who is subject to periodical attacks of hysteria who has given birth to two children, and one is a typical epileptic of the Grand-mal type of the disease, and the other of the Petit-mal variety. Of course these nervous fathers and especially these nervous mothers give to the world a nervous offspring that is more or less peculiar and odd, and yet there may be others in the same family gifted with extraordinary talents although at times somewhat ill-balanced. It is said and claimed by some of our best medical writers of this day and time that drunkenness in the parents is somewhat of a factor in producing unhealthy offspring and epileptic children. This cannot be confirmed by my observations, for if it did 85 or 90% of the children born in my county would be of the epileptic variety. So I am a doubter of this theory. Veneral excesses and syphilis have no direct connection with genuine epilepsy. Epileptiform convulsions may, as I have seen, be symtomatic of syphilis, being due to the cerebral lesion caused by this disease "syphilis."

Certain factors may determine the onset of epilepsy, although they cannot be said to cause the disease, except the symptomatic variety which develops after a previous encephalitis, such as over-exertion of mind or body, emotional disturbances or malnutrition on the one hand, and plethora on the other. And in certain acute febrile diseases, such as scarlet fever, acute gastritis, etc. Another important point is that the first attack is sometimes brought on by great mental excitement, and especially fright, but here too it is probable that the terror is merely the exciting cause, a tendency to the disease already pre-existing. And we must also be on our guard against confounding genuine epilepsy with the convulsive form of hysteria which very frequently develops after fright. In some instances there is an evident connection between epilepsy and a previous injury to the skull at birth or from a fall or blow, etc. At a certain interval after the trauma attacks begin which seem precisely like those of genuine epilepsy. This is known as traumatic epilepsy. These are not causes of genuine epilepsy, however, inasmuch as there is really some anatomical lesion of the cortex cerebri which in some way as yet unknown causes irritation of the motor centers of the cortex. It is often the case that this variety of epileptiform attacks is peculiar in that the convulsions are first unilateral or confined to a single limb corresponding to the seat of the injury in the opposite cerebral hemisphere. Reflex epilepsy. This name is applied to cases where each convulsive attack seems to be excited by reflex influences originating in some remote part of the body. Most cases have followed injury of peripheral nerves, and have ceased upon removal of the exciting cause. It is probable that sufferers from these attacks have had a tendency to disease of the nervous system. Reflex epilepsy should not be ranked in the same class with the genuine variety. I hesitate to use the term at all as I am a doubter of it.

Clinical History—The fully developed epileptic paroxysm is usaally described for the sake of greater clearness as made up of several stages. First, is the prodromal stage or the stage of the epileptic aura, not infrequently however there is no aura at all, the convulsion coming on without warning, but in a good majority of the cases I have seen the prodromata are well marked and are repeated with noticeable regularity and similarity before each individual attack, although the different cases of epilepsy differ greatly as the special phenomena of the aura occurring in each. The best manner in which to distinguish the various forms of aura is accordiug to the nature of the nervous phenomena whether sensory, motor, vaso motor or psychical, of these the most frequent is beyond a doubt the sensory. Here we have peculiar sensations. Beginning in the arm and running out to the tips of the fingers, or starting in the thighs and then out to the tips of the toes, etc. Or may start in the

region of the heart or stomach and then mount to the head. The aura which proceeds from the epigastrium is sometimes associated with a very disagreeable feeling of oppression and distress with nausea and vomiting. The aura may be referred to the nerves of special sense in certain instances the patient may discover that his room is filled with unpleasant odors, etc., which he likens to some familiar one. An aura of taste also occurs but it is very rare. An optical aura is much more frequent consisting of a subjective sensation of color or light and they will usually describe this as red appearing before their eyes, etc. An auditory aura is not very rare, it produces a sudden feeling of deafness in one ear or various peculiar sounds like whistling, humming, roaring, etc. The mortor aura takes the form of mild premonitory contractions affecting head, face, arm or leg, etc. There may be aphasic disturbances at the same time or you may if you will follow your case closely find symptoms of irritation of the unstriped muscles as strangling or a sudden desire to go to stool or to urinate, etc. Some times there is prodromal vaso motor phenomena where the aura consists of a sensation of cold or warmth often associated with excessive pallor or redness of the face, neck and hands. An attack may be ushered in by chilliness, perspiration or palpitation. The name of psychical aura is given to those initial symptoms which consists of vertigo, confusion of thoughts, or other pronounced disorders of consciousness, a frequent form for this to assume is excessive mental distress or excitement. The aura lasts usually only a few seconds, it may persist long enough for the patient who knows from past experience what is coming and to lie down, or take other precautionary measures to protect himself. In some few cases the aura may last for hours or even days and every time you meet your patient he will tell you that he is going to have another one of his spells as he calls the convulsive seizures. And some times the aura will pass away without being followed with a true epileptic fit, but it is usually followed by the second stage of the attack,—the convulsive stage. The convulsive stage of the epileptic attack almost invariably begins abruptly, perhaps there is no aura or only a very brief one before the patient falls suddenly to the ground with consciousness completely suspended. Insensibility is complete and often the patient sustains severe injury from his fall, lascerating the soft parts to the bone and which I have sewed up directly after the convulsive stage was over without any anesthetic of any kind and hardly a murmur of objection being made from the patient. The convulsive stage begins with a brief period of general tonic spasm of the muscles. The head is usually strongly drawn back, with the teeth pressed firmly together, and the tongue often suffers at this time, the teeth driven through this organ and the blood flowing freely from same. The trunk is curved backward in opisthotonos. The extremities are extended, the fingers are clenched over the thumb or spread widely apart. Inasmuch as the respiratory muscles participate in the seizure, breathing stops and the original pallor of the face soon gives place to deep cyanosis. This tonic convulsion ordinarily is but brief, perhaps ten to forty seconds. It is followed by the second period of the convulsive stage, that of the clonic convulsions. The facial muscles now exhibit the most violent contortions, the eyeballs roll or occasionally present a conjugate deviation towards one side. The head beats violently against whatever it has come in contact with and the muscles of the arms and legs and trunk undergo the severest clonic spasms. The pupils at first are more than likely contracted, but during the convulsive stage they become widely dilated, and do not react at all. The pulse at first become accelerated but not greatly, the temperature is normal or only a fraction above or below. The cutaneous reflexes are still suspended directly after an attack, but the tendon reflexes are generally somewhat exaggerated. Not infrequently an involuntary dejection takes place during the fit, or the bladder is emptied and occasionally a seminal emission takes place, and during these violent convulsions the body is often severely injured. The face which is usually pale at the beginning of the attack becomes extremely cyanatic. The veins in the neck become swollen and distended and the venous stasis is so extreme that some times minute hemorrhages occur into the conjunctiva. The skin of the face and lumbar regions especially being affected. The convulsive stage usually lasts for several minutes, then the spasm ceases, often after a long drawnout sigh, and the patient passes into the third stage or the post epileptic coma. He lies unconscious or semi-unconscious and his respirations grow quiet, and the cyanosis gradually vanishes. The coma finally yields to slumber which may persist for some hours, but there are exceptions to this; some patients that I have seen remain only a very brief time in this stage and soon recover from their attack and want to get up and want to do some one bodily harm thinking they had been hit by some one near them. This has caused a good many of our fights on the epileptic wards at the Eastern Ken-

tucky Asylum while I was Assistant Physician there. It is however not infrequently the case that for some days after, pains are felt and you will be called on to treat them for rheumatism in different localities of their bodies, where they have hammered themselves on the floor in the convulsive stage of their disease.

There are headaches, languor and exhaustion and mental despondency and irritability for some time. There may be more or less pain in the muscles particularly those of the trunk. There may be slight paresis of one limb or one side of the body after an attack but this speedily vanishes. Again in cases of pure epilepsy after recovery of consciousness there is no recollection of what has happened or it is very slight. The milder and rudimentary forms of epileptic seizures, Pet Mal. There are very often witnessed in epilepsy milder attacks of so-called Petit Mal- Some times there is only a transitory dizziness or slight faintiness or a brief loss of consciousness but without accompanying symptoms or motor irritation. These milder attacks may or may not be preceded by an aura. Cases have been seen where the patient suddenly pauses in the midst of conversation, checker playing or pitching quoits or other occupation, stares absently for a moment, then with equal abruptness goes on with what he was doing as if nothing had happened. There are all sorts of transitional forms between the slight attacks of unconsciousness and the typical epileptic fit. Very often a patient gives a short, piercing cry and falls down with only a slight twitching of the muscles of the face or arms, and in a few minutes is himself again. In other patients the attacks consist of a sudden pallor of the face, springing to the feet, rushing across the room, ejaculation of some short word, or in short it is hardly possible to describe all the different things that a patient will do who is a sufferer from the rudimentary and typical epileptic attacks. Cases of petit mal are generally rudimentary forms of the typical epileptic paroxysm and consist of a simple impairment of consciousness associated with slight motor symptoms, but in the epileptoid state the characteristic features of the typical epileptic attack are quite subordinate. The disturbance is paroxysmal and it can often be shown to be connected with genuine epileptic seizures. The greatest practical importance attaches to the psychical equivalent of epilepsy. These are attacks of mental disturbance which either immediately succeed a typical epileptic fit or occur independently. The attacks are manifested by states of complete mental confusion in which the patient may do the most unreasonable thing, may strip himself or destroy his clothing, and partake of anything soft enough to be bitten as though it was wholesome food. Besides these states of epileptic confusion there are also attacks of violent psychical excitement associated with fear, frightful halucinations, etc. In the young the attack may take a peculiar form, the child runs away from home, is peevish, collects all sorts of things together, makes strange noises, motions, gestures, etc. Among the rarer forms of epileptoid attacks are the epileptoid sweatings or a sudden outbreak of excessive perspiration in epileptics, which may or may not be associated with impairment of consciousness.

General Course of the Disease—In a large majority of cases epilepsy begins before the 15th year. The disease appears in early youth and sometimes even in infancy. It is an exception to the general run of the disease for it to make its first appearance in adult life. It is impossible to give a general rule as to the frequency of the paroxysms. Different cases differ very much. There are persons who have only two or three seizures during a life time, while others will run from one to four, five or six weeks, while those suffering from the severer type of the disease may have one or more fits every day. External influences some times affect the frequency of epileptic attacks. It is claimed that excessive use of alcohol or tobacco, and sexual excesses, and indiscretion of diet, etc. In women the appearance of the catamenia is often the signal for the occurrence of an attack. In many instances the disease begins with the first flow of the menstrual fluid from the genital organs and in some instances continues until the woman becomes pregnant, when in the majority of cases the epileptic seizures stop, or if the patient has an attack of any of the fevers my observation is that if they recover from the fever they never have any return of the epilepsy. There is a practical distinction between diurnal and nocturnal epilepsy. Many patients have attacks only during the day, while others have them only at night, being clear of them when awake. A case of nocturnal epilepsy may go on for a long time without any one knowing the patient is affected, without being detected, especially if the patient sleeps alone. He seldom has any recollection of what has occurred during the night; he may have a confused feeling in his head or a bitter tongue, or a disordered bed or he may yawn more than what is usual with him, all of which goes to inform him that something has gone wrong with him during his sleeping hours. With regard to the occurrence of the different varieties of fits all sorts of combinations

are possible, many cases never have any but the typical convulsions, but in many others there are also a greater or less number of attacks of petit mal. The latter may be even for a long period the sole indication of the disease. Often there are no epileptoid conditions whatever, while in other instances the psychical equivalents are the most prominent feature of this distressing disorder. During the interval between the attacks, many epileptics seem to be well both physically and mentally. Many epleptics, and especially those who have attacks at long intervals, are very capable and trusty, and I cannot at the present time call to mind that I ever found an epileptic that was a coward or not sympathetic in the extreme. I have seen them take off their coats and fold them nicely and place it under a brother inmate's head when he had been through an epileptic seizure and in warm weather and he had an attack out on the grounds they would stand over a fallen brother and keep the flies off of him until he was able to be on his feet again and do for himself. No other class of patients would do this much for their fellowman. Much effort has been devoted to the discovery of signs of physical degeneracy in epileptics. Relying upon numerous measurements made in divers ways to bear them out in their opinions, etc. Indeed all such peculiarities of this sort may be found in almost any families if close observation is made. I do not rely on this method much if any. When the disease has lasted some time and the attacks come at short intervals the patient's general health soon shows signs of failure. The mind becomes more and more affected, and the intellect grows feeble, memory shows signs of failure and general weakening of the patient's whole system ending in dementia. There are emaciation, paresis, tremor and other persistent disturbances of cerebral origin. In regard to the duration of the epilepsy, it must be classed as a life-long disease, and once an epileptic always an epileptic is my observation of the disease. It is true that the paroxysms cease for a time and the patient has all appearances of being cured. But let him receive some injury or his general health drop below normal lines and his old foe shows itself again and the Rip Van Winkle sleep that Miss Epilepsy has been enjoying is a thing of the past and the patient finds himself again confronted with his old trouble and he is woefully discouraged. An epileptic has a shorter life expectancy than a healthy person, especially as he may be taken away from exposure while in a paroxysm from cold, wet, etc., or from falling from some height, and if I were a medical director of a life insurance company I would never accept an epileptic as a satisfactory risk. The prognosis is always unfavorable and in general when the attacks are at long intervals the disease may suddenly assume a very grave form and end quickly. With regard to the distinction between nocturnal and diurnal epilepsy, the nocturnal is in my judgment the milder of the two.

Pathology—The fact that in the intervals between the attacks the patient shows signs of no disease leads us to believe that epilepsy cannot be due to any persistent macroscoplc lesion of the tissues. In many cases nothing can be found at the autopsy that will shed any light on the disease. We must for the present assume that the cause of the epileptic seizure is a functional condition of irritation going on in the cerebral centers. This brings us to the question which is usually asked, where shall we locate the spot of irritation and what are its nature, force, etc? And I am of the opinion that the next 100 years will find us with this spot still an unsettled question with the medical profession. I regret that I cannot inform you where you may place your index finger on the identical spot. I believe however that the motor centers must be intact in order to render the epileptic seizures possible, and how the stimulation travels from one center to another we have as yet no certain information that we can verify to an exact certainty. Impossible to demonstrate it in the living subject and in the dead one a good many "ifs" attached to it.

Diagnosis—Most cases of epilepsy are easily recognizable but you must also bear in mind that epileptiform convulsions may also occur as a symptom of cerebral diseases which do have an anotomical basis such as tumor, abscess, multiple schlerosis and hydatids. As a rule however such diseases are readily distinguished by the state of the patient between the seizures or by the further course of the illness. Weight should always be laid on the general character of the attack. The complete loss of consciousness in epilepsy, the dilation of one or both pupils, which do not react to light. We should also consider the character of the onset and the duration of the attack. In true epileptic attacks the convulsive stage seldom lasts longer than a few minutes and the deep and continued sleep is in favor of epilepsy and decidedly so.

Treatment—The medical attendant can help nature but there is no remedy known at the present time that will bring about a permanent cure in this sad affliction. The patient should be given a thorough examination from head to foot and any abnormality should be corrected. Old scars or

anything that obstruct the nasal or auditory passageways should be removed and if we find any symptoms of irritation along the intestinal tract it should be removed. It is a good idea to clean out and keep clean the intestinal canal and the following prescription is a good and safe one for this:

℞ Ippecac syrup 2 drachms.
Nux Vomica Tr 2 drachms.
Cascara Sagrada fld ext 2 oz.
Glycerine ad oz 4.

Mix. Sig one teaspoonful in a glassful of water night and morning, not to be taken nearer than one hour of a meal. And if the patient is seen when everything points to one of his seizures use your hypodermic syringe loaded with the 1-100 gr. of the hydrobromate of hyoscine or even 1-50 if you know how he will stand the drug. Your first visit you had better use the smaller dose until you know what to expect from use in any given case. And to quiet the patient and to keep his nerves and nerve centers at rest and give nature a chance to repair the damage, I usually leave the following prescription:

℞ Fowler's solution 1½ drachms.
Sodi bromide ½ oz to 2 oz.
Aqua pura ad oz 4.

Mix. Dose, one teaspoonful every three or four hours in a glassful of pure water, or the following:

℞ Chloral hydrate 2 drachms.
Sodi bromide 6 to 8 drachms.
Aqua peppermint ad oz 6.

M. One tablespoonful in plenty of water every three or four hours. Morphia should not be used at any stage of the game in the treatment of epilepsy as I think it helps to increase the cerebral congestion, a thing that should be avoided. Of course if your patient is one with plenty of blood and a bilious temperament you can rouse up his secretions with 5 to 10 grs. calomel at bed hours and follow the next morning with one or two tablespoonfuls of granular effervescing sodium phosphate in a glass of hot water.

Affections Characterized by Gastro Enteric Catarrh.

By G. Paul LaRoque, M. D., Richmond, Va., Lecturer and Bedside Instructor in Surgery, University College of Medicine, Etc.

With many intra abdominal affections, the phenomena of gastroenteritis constitute an essential part of the symptom complex; in some the signs of this condition are relatively inconspicuous; and in still others, inflammation is entirely absent.

The alimentary signs may be referred chiefly or wholly to gastric or to intestinal disease, though in many cases the signs of combined gastroenteritis will be presented.

Etiology.—Except in cases of infection by certain specific microorganisms, the pathogenic action of bacteria in the gastro-intestinal canal is antagonized, inhibited and often prevented by conditions of local and general health. The specific causative agents of dysentery, cholera morbus, influenza, Asiatic cholera, and certain other infectious processes, may excite disease independently of impaired resisting power, though such enfeeblement greatly favors their action. The primary local lesions incident to typhoid fever, tuberculosis, syphilis and actinomycosis, are rather ulcerative than truly inflammatory in nature, though with the specific ulceration incident to these processes is generally associated inflammation, due to the action of microorganisms normally present upon the diseased mucous membrane.

Other exciting causes of inflammation may be introduced into the canal from without or from structures in anatomic relation to the stomach and bowels, or rarely the organisms may be deposited in the walls of these structures as emboli from remote sources.

Since, in many cases, the phenomena of gastroenteric catarrh are due to localized causes remediable by surgical procedures, it is essential to recognize and to differentiate in the individual case the underlying etiologic factor. The following classification may be useful:

(1) *Ingestive gastroenteritis.*

(a) Dietetic—dependent upon excessive quantity or irritative quality of food, irregularity in taking meals, ingestion of excessively hot or cold fluids. (1) Simple catarrh, (2) cholera morbus (3) Ptomaine and leukomaine poisoning.

(b) Alcoholic, (acute and chronic).

(c) Medicinal—Due to a single administration of a large dose, or prolonged administration in small doses, of such drugs as mercury, arsenic, antimony, iodides, bromides, salicylates, the essential oils, balsams, etc., etc.

(d) Corrosive—Incident to accidental or intentional ingestion of certain concentrated acids, alkalies, metals and other caustic agents. Phosphorus poisoning is included in this group.

(2) *Systemic, and symptomatic gastroenteritis.*

The systemic affection occurs during the course of certain constitutional affections; notably, rickets, purpura, scurvy, gout, diabetes, phthisis, acute and chronic suppurative diseases, especially when drainage is imperfect, or uraemic state, chronic lead poisoning, Addison's disease, and with

exophthalmia goitre.

Symptomatic catarrh is noted during pregnancy and diseased states of the female pelvic organs, acute yellow atrophy of the liver, malarial "biliousness," certain extra alimentary febrile diseases, chlorosis, uncompensated circulatory disease, and certain affections recently described by Osler, and characterized by erythematous skin lesions.

In many of these affections the catarrh is doubtless infectious in origin, arising from the action of normally existing bacteria on the feebly resistant mucous membrane.

(3) *Infectious gastroenteritis.*—This is due to mixed infection by specific and non-specific microorganisms and includes: Typhoid, tuberculous, syphilitic and dysenteric disease, gastrointestinal actinomycosis, measles, influenza, infantile diarrhea, cholera infantum, Asiatic cholera, pyæmic abscess formation, diphtheritic infection, etc. In this group should also be included the acute gastroenteritis often attributed to "taking cold."

(4) *Traumatic gastroenteritis.*—This is caused by foreign body irritation, enteric calculi, fæcal accumulation, animal parasites and rarely external traumatism.

(5) *Mechanical gastroenteritis* is that variety dependent upon benign or malignant infiltration, stricture or tumor formation, ulceration, sclerosis, congenital and acquired deformities, visceroptosis, mechanical obstruction, hæmorrhoids and other varicosities, and due to traction upon and interference with the normal motility of any part of the stomach or intestines caused by certain movable kidneys, tumors and adherent structures.

(6) *Concomitant gastroenteritis.*—This is incident to disease of the liver and biliary apparatus, pancreas, appendix vermiformis, Meckel's diverticulum, the omentum and peritoneum, portal engorgement; and to carcinoma, inflammation and other affections of the oesophagus, throat and oral cavity.

(7) *Functional gastroenteritis.*—This results from the imperfect digestion, incident to muscular atony and paresis, excessive secretory or muscular activity or to nervo-muscular incoordination.

This in the form of true catarrh, is always secondary to various manifestations of functional derangement characterized by symptoms in many respects similar to those of gastroenteritis, but in which the pathologic phenomena of inflammation are not primarily present (see below).

Symptoms.—Certain phenomena point definitely to gastroenteric disease, others are constantly present though not confined to such affections, while still other signs may or may not be noted and are therefore of little positive or negative diagnostic value.

The most valuable cardinal symptoms are those referable to alteration of function; signs incident to the morbid process; and the presence of morbid products in the oral and anal discharges.

Gastroenteritis may be acute, subacute or chronic. The phenomena of chronic disease may be continuous, with or without intervals of diminished or exaggerated intensity; or the signs may manifest a distinct tendency to recur after varying periods of entire absence.

The normal relation between the various parts of the alimentary system, both anatomically and physiologically, is so intimate that individual functions of various parts are mutually interdependent. Gastric and enteric affections are frequently combined though in most cases it is practicable to determine the primary or predominant affection.

Acute Gastritis.

Symptoms:—

(1) Loss of appetite amounting generally to disgust for food.

(2) Foul breath, coated tongue, pasty sensation in the mouth.

(3) Epigastric fullness or distress, more marked after eating, may amount to distinct pain.

(4) Nausea, retching, eructations and vomiting are spontaneous and easily provoked. Evacuation of the stomach is often conducive to relief. A single copious bowel movement is beneficial, saline purgation often curative.

(5) The vomited material consists at first of undigested food (if such has been taken), large quantities of gastric mucous, water, generally a small amount of H Cl, and is often of sour odor and taste, due to butyric, lactic and other acids of fermentation. Later bile may be ejected, and the material is subacid, neutral, or alkaline. Dependent upon the nature and severity of inflammation small quantities of blood and rarely pus may be vomited.

(6) Thirst for cool drinks is generally noted and small quantities of such are grateful to the inflamed, hot mucous membrane.

(7) Evidence of an exciting cause may generally be discovered.

Superficial and deep tenderness in the epigastrium is noted. Gastric and intestinal colic may occur. Constipation is the rule unless the gastritis is associated with enteritis. Headache is generally noted. Fever is conspicuous only in children, though it may occur in adults. Such symptoms as these are of little value in differential diagnosis.

Acute Enteritis.—Certain cardinal symp-

toms are common to all varieties.

(1) Enteric colic.

(2) Pain and tenderness, incident to inflammation and located in the part affected.

(3) Borborygmus and exaggerated peristalsis.

(4) Excessive mucous and in severe cases blood and pus in the intestinal discharge.

(5) Indigestion, both gastric and intestinal, is marked by variable degrees of anorexia and by imperfectly digested food material in the evacuations.

(6) Diarrhea is present in greater or less degree except in rare cases in which the process is confined to the duodenum or when complicated by peritonitis or obstruction. The intensity of diarrhea varies directly with the extent of mucous membrane involvement and in cases of localized areas, with the nearness to the anus. The fæcal material is always foul, mucoid and gaseous, generally watery, often bilious and in severe cases bloody and purulent. A healthy colon may absorb much of the watery element of the material. Mechanical obstruction below the caecum, or general peristaltic paralysis may prevent defecation. In such cases stercoraceous vomiting replaces diarrhea.

(7) Oliguria and quantitative thirst are in intensity directly proportionate to the watery material.

(8) Fever, dependent upon absorption of toxic material, is often, though not always, inversely as diarrhea, and in children, hyperpyrexia is common. Collapse may ensue.

(9) Gaseous intestinal distention always present, is dependent upon fermentation and varies inversely with peristaltic activity.

(10) Etiologic factors must be sought.

Certain signs point to involvement of certain areas.

Duodenitis.—Occasionally hepatic colic or jaundice appear secondary to the gastro-enteric signs, incident to extension of the process to the biliary passages. Constipation may exist but the fæces still contain mucous. The signs of concomitant or primary gastric catarrh are also present. Tenderness is chiefly above and to the right of the umbilicus.

It is from this source that infection of the biliary passages and portal vein most commonly arises. Biliary colic, localized pain and tenderness at the junction of the middle and lower thirds of a line drawn from the ninth right costo-chrondal junction to the umbilicus (termination of the 8th and 9th dorsal nerves, Mayo-Robson point) or directly over the gall bladder; with fever, leukocytosis, rigidity and perhaps bile retention would point to such infection.

Ileo colitis.—Pain and tenderness most severe in the right iliac fossa and along the course of the colon, marked fluid diarrhea with large quantities of mucous seen as masses in the fæcal matter, point to ileocolitis. Inflammation of this area (cæcitis) is often attended or followed by appendicitis. The sudden substitution of constipation and vomiting for diarrhea, and of fixation for protective rigidity of the right rectus, especially if attended with a rise of temperature and leukocytosis would point positively to appendiceal peritonitis.

Sigmoiditis and proctitis are attended by pain and tenderness in the left iliac fossa, burning, teasing, often tormenting tenesmus, with painful, frequent, small mucoid, often bloody and purulent evacuations. Such symptoms call invariably for local examination.

Chronic gastritis and *chronic enteritis* are invariably associated in greater or less degree, incident to the intimate anatomic relation, and mutual interdependence of function in the various parts of the canal. In many cases, partial functional compensation, particularly on the part of the intestines, may occur, but this is generally transient, never perfect, and is subject to periodic manifestations of complete failure. The localizing and predominant signs in a given case are dependent largely, though not entirely, upon the location and nature of the underlying morbid process and causative factor.

(1) Alteration of appetite. This on the whole is impaired. There may be qualitative or quantitative alterations. Certain articles hitherto relished are no longer desired, and in general, smaller total food quantities are ingested. In marked cases there may be complete disgust even at the sight or odor of food; the patient "eats to live." In the milder forms of catarrhal inflammation only certain meals may not be enjoyed. Such anorexia is often attributable to slight fatigue (nervous or muscular), and is always conspicuous when the bowels are constipated. Excessive mucous in the stomach is attended by anorexia, and this may be incident to excessive mucous secretion, to mechanical obstruction or to constipation. After evacuation either by the tube, by vomiting, or purging and in many cases an hour or so after the ingestion of water, the appetite may be improved. In many cases the patient may feel hungry until the food is seen or tasted, whereupon the appetite is immediately lost. Liquids are generally relished; thirst is often conspicuous. In the catarrhal forms, condiments may be relished and when subacidity exists, acids are craved. Alternating periods of bulimia and anorexia may occur. The milder manifestations of such perver-

sions of appetite, especially when persistent or constantly recurrent, demand a search for the underlying cause.

(2) Nausea, retching, eructations and vomiting. These symptoms are generally caused either by retention of inflammatory and fermentation products, or by the presence of food. They are generally more marked during the period of either gastric or intestinal digestion, i. e. immediately or two or three hours after meals. When noted most markedly in the morning especially before breakfast, localized causative lesions in the stomach should be suspected. The morning vomiting of gastric carcinoma is classical, and the retching morning nausea of chronic alcoholic gastritis is well known even to the laity. Gaseous and acid eructations are common and point to fermentation of material retained in the stomach. The vomitus is generally copious, especially so when pyloric obstruction exists, consisting of food material, water, excessive mucous, fermentation bacteria and their products (butyric, acetic, lactic and other acids), often blood and sometimes pus. Large quantities of foul, watery, frothy material resembling "water brash" are characteristic of the distended, chronically inflamed stomachs incident to pyloric obstruction. In the latter stages of the act, when vomiting is violent or persistent, bile appears with the alkaline duodenal fluid. HCl in the common forms of disease is invariably diminished, often absent. With the gastritis constantly attendant upon gastric ulcer and often combined with or resulting from certain neuroses of the stomach, HCl may be normal in amount or excessive. In these latter cases, fermentation bacteria and their acids are inconspicuous or absent.

(3) Constipation and diarrhea. In general these signs are conspicuous in almost direct relation to the nearness of the seat of the disease to the mouth and anus respectively. This is not invariably true. The reflex intestinal rigidity incident to deep seated i. e. submucous or muscular inflammation, even of the colon, is manifested by constipation; and the inhibitory constipation of certain painful rectal affections is well known. The two symptoms may alternate with each other and this regardless of the predominant seat of disease, though in gastric affections, constipation is habitual, and in colonic disease, the rule is diarrhea. Diarrhea in one past 40 years of age appearing immediately upon arising in the morning is strongly suggestive of carcinoma of the rectum or sigmoid.

The stools are generally foul; the passage of excessive mucous either mixed with or forming a coating of the fæcal mass is the rule. In all cases, there is excessive flatus. Excessive steatorrhea and the presence of undigested meat fibre in large amounts is characteristic of pancreatic disease, though any affection characterized by deficiency of bile in the bowel may be the cause. Acholia, characterized by light colored gray or yellow fæces, generally hard and dry, is indicative of biliary obstruction and is generally attended by icterus and biliuria. Constipation is the rule with acholia, though foul, watery diarrhea may exist with complete biliary obstruction. Tarry stools point to bleeding high in the canal, generally duodenal or gastric ulcer, though blood long retained in the colon becomes distinctly black. Bright red blood per anus comes from the rectum or colon. Minute quantities of blood demand chemical tests for their detection. Pus in conspicuous amount, means disease of the sigmoid or rectum, though a sudden discharge of purulent material may rarely indicate rupture of an abscess into any part of the alimentary tract. The significance in the fæces of animal parasites, their eggs, larvæ and segments of tape worm is obvious.

(4) Pain and tenderness. These may be entirely absent, insignificant or periodically harassing. Gastrointestinal colic is apt to occur at irregular intervals. Local pain and tenderness may generally be elicited over the region of disease. The degree of pain and tenderness are in general proportionate to that of the associated specific lesion.

These signs are more marked at some period of digestion, either gastric or intestinal, and may be entirely absent when the part affected is at rest. Vomiting, purging and lavage in most cases produce marked relief. In the mild cases, moderate fullness in the epigastric, umbilical or lateral regions may be the only manifestation of pain. "Heartburn" is conspicuous in gastric disease.

(5) Borborygmus is marked with enteric catarrh. The loud rumbling noises may be the cause of much complaint.

(6) Gastric and intestinal tympany aue the rule, though after paroxysms of copiors vomiting, or when associated with diarrhea, the belly may be flat or retracted.

(7) Peristaltic activity as determined by inspection, palpation and auscultation, is in a measure pari passu with constipation and diarrhea. Mechanical lesions, however, are attended by active peristalsis above the seat of disease and compensatory hypertrophy of the muscular coat may cause these movements to be easily recognized. In many cases motor insufficiency is conspicuous and this is indicative of failure of compensation. Atonic dilatation finally ensues.

(8) Absorption as shown by the salol,

potassium iodide and other tests is delayed. Prolongation of gastric digestion is easily determined.

(9) The tongue is flabby, heavily coated, often enlarged and indented by the teeth. The breath is foul, there is a pasty sensation in the mouth and chronic pharyngitis generally coexists.

(10) An exciting causative factor should in every case be sought.

Certain accessory symptoms are generally present but are in no way diagnostic. The complexion is sallow, anaemia exists, the skin may be dry or moist. Vertigo, headache, somnia or insomnia, hypochondriasis and other nervous symptoms are common. "Stomach cough" is frequent. The urine is generally diminished, concentrated and contains an excess of indican. Debility and emaciation develop, but save in malignant disease, profound cachexia does not occur. All symptoms are subject to exacerbations and remissions of intensity.

Differential Diagnosis.—It is important to differentiate the phenomena of gastro-intestinal inflammation from certain conspicuous, incidental, functional, it may be combined, though often isolated, signs of gastro enteric disturbance, incident to non-inflammatory affections of the alimentary tract and its accessory structures, and appearing either accidentally or as a cardinal symptom of certain extra alimentary diseases. The phenomena of these affections may be appropriately designated *pseudo gastroenteritis* though when prolonged, a true catarrhal infiammation may be produced.

This group includes the sensory, secretory and motor derangement incident to gastric and enteric neuralgia, hyperaesthesia, myasthenia, neurasthenia, hysteria, etc., recurrent bilious attacks associated with errors of refraction and grave ocular defects, the crises of tabes, other spinal diseases and sometimes pheumonia; the vomiting of middle ear and auditory nerve disease; the vomiting and constipation of meningitis, brain tumors and other cerebral affections; the reactionary nausea and vomiting of shock; the morning nausea and vomiting of pregnancy; the preconvulsive vomiting of certain cases of epilepsy, and that sometimes noticed just before apoplexy and the reflex gastric disturbances incident to such severe nerve irritation as is caused by violent renal or utero-ovarian colic, torsion, injury or acute inflammation of an ovarian cyst or testicle; spinal and cerebral contusion, and injuries or disease of the abdominal wall, parietal peritoneum and omentum. The instantaneous functional disturbance incident to the splanchnic nerve irritation attendant upon disease of peri and para alimentary structures such as strangulation of gut, acute pancreatitis and peritoneal disease, is always causative of inflammation of the tract, and the onset of true upon false gastroenteritis is often undeterminable.

The nausea and vomiting due to renal, utero-ovarian and testicular colic, spinal, cerebral and abdominal traumatism, is generally transient and accompanied by greater or less shock.

The diagnosis of pure functional disturbances depends; First, upon the study of the positive and negative individual gastro-enteric signs presented. Second, upon the discovery of signs pointing to disease of the extra alimentary structures (This is of great importance in cases in which the phenomena of gastroenteric catarrh exist incidentally or as in independent condition,) and finally upon the intelligent consideration in the light of fundamental anatomic physiologic and pathologic laws, of the corelation of symptoms to each other and as a constant part of the general symptom complex. The symptoms of pure functional affections are erratic, changeable, vary greatly in intensity; and individual symptoms are greatly exaggerated in comparison with others. The signs of organic disease behave in no such erratic way. There are no single pathognomonic alimentary signs of these affections and in every case a searching examination must be made for the causative factor. Most so-called neuroses have for their basis an organic morbid process of which gastralgia and enteralgia, hyper- and hypochlorhydria, hyperaesthesia, etc., etc., are prominent symptoms. A diagnosis of gastric hysteria or neurasthenia can be made only by rigid exclusion after prolonged study.

Certain phenomena if present point positively to gastroenteric organic disease. Obstinate diarrhea, pernicious, continuous vomiting, excessive mucous and fermentation products in the vomitus or fæcal material; gastric and intestinal hæmorrhage; acholic fæces; absolute constipation even to flatus; stercoraceous vomiting; dilated stomach; these are among such positive signs.

Clinical significance of gastroenteritis. The affections characterized by the symptom complex of acute or chronic gastro-enteric inflammation, may be classified in groups dependent upon the association of certain prominent symptoms. Acute gastro-enteritis may represent an exacerbation of a chronic process and this must be determined from the history.

A. Affections characterized by gastro-enteritis with conspicuous abdominal pain and diarrhea.

Dietetic gastroenteritis (diffuse) especially that due to qualitative dietetic errors. (1) Simple catarrh (2) Cholera morbus. (3) Ptomaine and leukomaine poisoning. Medicinal gastroenteritis. Corrosive gastroenteritis. Catarrh of bowels incident to "taking cold." — Generally accompanied also by vomiting.

Infantile Diarrhea.

Cholera Infantum.

Cholera nostras and true cholera.

Measles, influenza and other systemic infections.

Dysentery.

Typhoid, tuberculous, syphilitic, diphtheritic and actinomycotic ulceration.

Certain erythematous skin affections.

Rickets.

Gout. (In this the symptoms are apt to be paroxysmal).

Purpura.

Scurvy.

Uraemia—generally accompanied by constipation, often paroxysmal or terminal diarrhea.

Amyloid disease of intestines.

Addison's disease (diarrhea is apt to be a terminal symptom).

Acute yellow atrophy of the liver.

Pyæmia (abscesses in the bowels).

Puerperal peritonitis—not always diarrhea.

Foreign body irritation (non-obstructive). Gall stones in the bowel. Enteroliths and swallowed material. — May be alternating periods of diarrhea.

Fæceal concretions. Intestinal parasites. Non-obstructive tumors and strictures. — Constipation is the rule.

Intestinal obstruction, high in canal. Intussusception, any part of the bowel. — Diarrhea of the false variety may be noted.

B. Affections characterized by abdominal pain and gastro enteritis with constipation, nausea and vomiting.

Gastritis } of any origin,
duodenitis } see etiology.

Gastric or duodenal ulcer.

Cholecystitis, cholangitis and cholelithiasis.

Appendicitis.

Pancreatitis, tumors of pancreas, gall bladder or ducts.

Mesenteric embolism and thrombosis (may be false diarrhea with intestinal hemorrhage).

Intestinal obstruction (complete).

Peritonitis of any origin, contusion of the peritoneum.

Systemic infectious fevers, especially malaria.

Diabetes and Addison's disease (nausea and vomiting may not be present).

Uraemia (often diarrhea).

Gout (diarrhea generally occurs paroxysmally).

Uncompensated circulatory disease.

Cirrhosis of the liver.

Pregnancy and diseases of the female pelvic organs.

Visceroptosis, (symptoms tend to alternate and remit).

Localized rectal affections, (nausea and vomiting generally absent, constipation is inhibitory, may be tenesmus).

With this brief outline, it is the writer's purpose, merely to direct attention to the importance of an early recognition of the signs of true gastroenteric catarrh as contrasted with the phenomena of pendo gastroenteritis, and to urge a painstaking, careful, differential diagnosis. based on the cause in the individual case.

Many lists of affections classified according to the predominance of certain signs in the symptom complex, may be formulated; but on the whole, an intelligent, systematic and searching study of the individual case in relation to its history and evolution of the spmptom complex, together with the physical findings is the logical and most satisfatory method of determining, by a process of analysis rather than exclusion the underlying causative lesion.

Post Nasal Adenoids.*

By James M. Parrott, M. D., Kinston, N. C.

Though years have elapsed since Meyer of Copenhagan proved the great clinical importance of post nasal adenoids, the average practitioner of medicine seems not to have grasped, even as yet, their full role in the human economy. Most physicians still look upon them as did their discoverer, William Hunter, as merely curiosities of no special significance.

Personally, I know of no pathological condition of benign character situated in a comparatively open space which is fraught with so much danger to the patient, both immediate and remote, directly and indirectly, as "adenoids". The train of symptoms are multiple, affecting directly and indirectly almost the entire body. Ear aches are frequent, the patient often presents chronic purulent otitis media, partial deafness results, and the sufferer is subject

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to frequent attacks of coryza, is very susceptible to croup and all throat diseases, especially enlarged tonsils, has a peculiar nasal voice, mouth is constantly open, in many cases the nervous system is almost a wreck, the patient is usually at once a very restless, yet heavy sleeper (mark the expression restless yet heavy sleeper), is pigeon-chested, has indigestion, dullness of mind, idiotic expression. These and many other symptoms, most of them most always present in a more or less modified form, make up a distressing picture. When indicated and properly and promptly done there is no operation in the whole domain of surgery which is followed by more satisfactory results, both to patient and surgeon, than the removal of post nasal adenoids. I have often seen the otorrhea discontinue. nervous symptoms of the most serious kind disappear, mental quickness supercede almost idiodcy, indigestion cease, constipation, diarrhea and enuresis stop, a whole chronically diseased picture changed to one of perfect health after simply removing adenoids and their almost constant companions —enlarged tonsils.

In my opinion too much stress cannot be laid upon the importance of this subject, especially by the general practitioner. It is an operation not fraught with any special danger, and the family physician should not hesitrte to advise it.

Etiology.—Etiology of adenoids is rather obscure. It is an interesting and well known pathological fact that in many families lymphoid tissue has a strong tendency to develop to an extreme degree. I have noted the presence of adenoids in several children of the same family. This extra-pathological lymphoid development is often manifest in other parts and other structures of the body, notably in tonsilar enlargement. The existence of adenoids is considered by many to be perfectly normal in most very young children. I am not fully convinced that this is true. I must say that I feel that every third tonsil should be removed as soon after its presence is discovered as possible or convenient. Therefore, I am not much disturbed as to their origin. Koplik states that they are simply exaggerated growths of the tissue, which is normally present in this space (posterior naso-pharynx). It is true that in many cases they cause practically no symptoms, still, for reasons discussed later, even though they cause no direct trouble they should be removed always.

Many of these cases present glandular enlargements, and when many glands are found enlarged in children very, very often the naso-pharynx is filled with adenoids. Bishop says that "Heredity plays an important role in the etiology of this affection. They are always to be looked for in children with hypertrophic rhinitis, and enlarged faucial tonsils." William declares "Chronic Rhinitis and all conditions which lead to hypertrophy of the faucial and pharyngeal tonsils generally go together, while both usually atrophy in adult life." While my observations do not entirely lead me to the above conclusion, yet, in the main, I believe Williams is correct. I am sure that in the majority of babies adenoids may be demonstrated, even though many do not present a chronic rhinitis or pathological condition of the nose or throat. Enlarged tonsils in infants, particularly in children from six months to two years old, are generally accompanied by adenoids. This is particularly true of rhinitis. Whether they have a direct causative effect is not positively known. It is my personal opinion that such is not the case. I believe there is a common cause behind all. Damp and cold climates no doubt act as predisposing causes, and same may be said of congenital or acquired narrowing of the naso pharynx. Power, of London, says that "Such narrowing leads to chronic hyperaemia, and in course of time to over-growth of tissue." This authority also points out the fact that syphilitic taint produces a somewhat similar over-growth of pharyngeal tissue, etc. There is no question in my mind but that, to say the very least, these growths often develop very rapidly after an attack of diphtheria, pharyngitis, whooping cough and the examthemata. Williams, of London, declares "The adenoid tissue of the upper and roof of the naso-pharynx is liable to hyperplasia and chronic inflammatory changes analogoues to these which produce grandules in the phrynx. The over-growth throws the mucous membrane in the folds, etc. This condition may be present very early in life, and may often, it is said, be congenital." The naso-pharynx varies in size in different individuals, and when the channel is small the obstruction is very pronounced, even from a medium size adenoid, while if the channel is broad a larger adenoid might not give any manifestation of its presence.

Pathology.—But little is known of the pathology of the adenoids, in fact there is little to know. Newcomb, of New York, in the American Text-Book of Diseases of the Eye, Ear, Nose and Throat says "Under a microscope the tissue is seen to be covered with stratified calumnar epethelium, more or less deprived of its ciliae. The surface is deeply furrowed, giving the nose a lobnated appearance. The bulk is made up of lymphoid cells with scanty blood supply (Do not let the beginner think that the

operation will be bloodless because of this —Author). These cells are arranged in the usual "node" form, with inter-nodal areas sparsely supplied with a low grade of connected tissue, which, however, is a fairly abundant blood supply." The most important point to note, quoting from the same author is "The lymphoid vessels run near the bottom of the folds into which the surface is thrown." This morbid anatomical point throws much light on one of the possible effects adenoids may have on the general system. It is by this lymphoid distribution that many cases of cervical tubercular adenoids develop. I believe if the nasal membrane is healthy, if the tonsils and the teeth are normal, if no adenoids are in the throat, that it is practically impossible to contract cervical tubercular adenitis. In infants the teeth, when present, are usually sound. At first nasal membrane in almost all cases is normal, and the tonsils nearly always are as they should be. By exclusion, therefore, I reach the conclusion that most cases of tubercular glands of the neck in early life are infected through the agency of the lymphatic circulation from the naso-pharyngeal grandulations. Adenoids are somewhat like a cauliflower in appearance. The furrows of the surface are over-hung by, and almost, if not quite covered with its tissue, presenting the appearance somewhat of the brain surface. Mucous and particles of food lodge in these folds and at once become hot-beds for all organisms. It is necessarily and absolutely impossible to thoroughly cleanse and disinfect adenoids. Thus they become extremely dangerous to the little sufferer, both immediate and remote.

Symptoms.—As with most diseases the symptoms of a typical text-book case of adenoids are so clear-cut as to lead to a diagnosis without much difficulty, and to continue the comparison as with most diseases. many times when the symptoms are not well defined an error in diagnosis is rather eafy. However, when once seen and studied the picture presented by a case is not soon forgotten. Ever keep the facial expression in mind, and in some instances that alone will lead to a correct diagnosis. Notice a typical case, anything else like it? See the vacant, and in some cases almost idiodic stare, notice the flat bulging nose, the slow, undecided, stupid movement, the unintelligent vacant expression, and the almost stammering, certainly hesitating, speech, and observe when the face is at rest the patient holds the mouth open—a mouth breather—and hence generally the decayed teeth, observe the somewhat stooped shoulders and thin chest, look for the bitten finger-nails—denoting nervousness, hear the kick from friends because the victim snoars. They say the sufferer is a very restless, though very deep heavy sleeper, notice that deafness. Watch for these "signs" and answer, can any other disease present just such a picture? Are these all the symptoms? By no means no. Let us look at them in detail. Musser says in his Medical Diagnosis, "The symptoms may be classed as primary and secondary. The former are local and due to the foreign substances per se; the latter are local and general. The former are catarrhal; the latter the result of "stenosis." This is a splendid epitome of the symptoms. I prefer to class them simply as local and general, following somewhat the idea of Musser.

On general inspection we often note the peculiar appearance in adenoids disease, as noted by Dawson Williams. These must not mislead one, however. In many instances, often even in cases which are very pronounced, it is entirely absent. When present it invariably indicates adenoids. The teeth are often decayed, possibly due to the mouth breathing however, and hence of no direct connection with the disease. There is in many cases a muco-purulent discharge from the nose. Indeed, I believe this is found more or less in some stage in exery case. There are frequent attacks of coryza and apparently of rhinitis. Very often the discharge is tinged with blood. The ears present an interesting study. Deafness, more or less decided, is often times caused indirectly by adenoids. Williams, of Bristol, England, declares, and rightly, that this deafness is brought about either by blocking the orifice of the Eustachian tubes or by otitis media purulenta, resulting in perforation of the ear drums. When the tube is blocked the membrane tympani presents a depressed appearance.

In the great majority of infantile cases presenting a chronic or recurrent discharge from the ear, adenoids are at the root of the evil. Often I have been consulted for disease of the ear and on examination discovered adenoids, the removal of which, together with appropriate treatment of the ear, resulted in a prompt and effective cure. If the growths are large and located well up into the naso-pharynx or in the pharyngeal center they may not press on the Eustachian tubes, and hence in this way deafness may not result. On the other hand, if located in the tubal opening, small ones may cause decided loss of hearing. By their peculiar topography and the difficulty of preventing the lodging of germs in the recesses on their surfaces they are veritable incubators. In this way the ears are often easily affected. Particularly is this noted in scarlet fever, diphtheria and whooping-

cough. The importance of thorough and frequent nasal douching with alkaline antiseptics in all the infectious diseases of childhood cannot be too forecably urged.

Certain authorities, particularly Musser, state that oft times there is an impairment of taste and smell. I am prepared to accept this statement, though I have never noticed it, and hence cannot vouch for its correctness. An oral inspection reveals in many cases a high arched palate, as expressed by Casselberry. He claims this deformity to be due to adenoids. This in my opinion is a little "far fetched." I admit they may, in some cases, indirectly produce such results. I am forced, however, to agree with certain dentists who attribute this abnormality to a perverted position of the permanent teeth. Because of obvious reasons there is generally present, more or less often, a nasal twang to the voice. The entire absence of this should not be misleading. In the American Text-Book on Diseases of Children this very correct statement is found "The septal deflection acts as an additional impairment to nasal respiration and drainage, and becomes a potent factor in the evolution of hypertrophic rhinitis, or that form of nasal catarrh characterized byenlargement of turbinate bodies." Bishop notes the presence of hypertrophic rhinitis in adenoids, which is a very important observation. Many, many times the rhinologist is consulted for treatment of this condition, and finds unless he removes the accompanying adenoids his patient does not improve, and sooner or later slips away to one who is mindful of the pathological causative importance of adenoids. Tonsils are frequently enlarged. As a matter of fact, in most cases of very young children (from eighteen months to six years of age) presenting enlarged tonsils adenoids large and cauliflower-like in appearance are found obstructing the upper pharynx. I have noted that in these particular cases the tonsils are rather characteristic. They might be demonstrated "adenoid like." They are large and flabby, non-adherent (unless accompanied by history of previous attacks of acute tonsilitis), and closely resemble a piece of sponge. Parenthetically I may remark here that after the adenoids have been removed it is scarcely ever necessary to do more to the obstructing tonsils than to simply "sniff" off the outer or oral surface and to break down all adhesions. The stump then rapidly atrophies.

While discussing the tonsils it may not be amiss to state that often a simple enlargement of the submaxillary and even superior cervical lymphatic glands is some times noted. In fact, in many cases there seems to be a strong tendency to a general lymphadenomatous condition or increase of lymphoid tissue, while tuberculosis very often gains access to the system via adenoids, and is one of the most important dangers to be considered. These enlarged glands many times are not tubercular, and will rapidly disappear (unless too long enlarged) after the removal of adenoids and tonsils.

The throat in adenoid cases is some times dry and glistening, but usually a "patch like" collection of mucous is seen covering the post pharengeal wall. Because of this accumulation and the "dripping" from the adenoid area there is sometimes present a frequent clearing of the throat. Several times I have been consulted by this annoying symptom called by the laity catarrh of the throat and failed to cure, of course, until the adenoids were removed. Cough is often noted, and is produced usually, in my opinion, by the falling of mucous. It may sometimes be caused by an apparently elongated uvula. This latter condition is almost always only apparent, however. The soft palate is pushed down in these cases and with it the uvula, which finally brings on the cough by irritation.

The choking sensation so frequently seen in these little sufferers is probably neurotic in origin. These and the other neuroses, such as enuresis, night terrors, nervousness (a pseudo-choreic condition) accompanying adenoids "are all due to overloading of the blood with carbonic acid gas," (American Text-Book, Eye, Ear, Nose and Throat) produced by obstructed and diminished respiration. It is interesting to note here that Graiubech reports enuresis in thirteen per cent. of adenoid patients.

Retzius and Axel Key have demonstrated the fact that there is a close "anatomical relation between the lymphoid channels and the naso-pharynx and those at the base of the brain." This may account in some measure for the aprosexia of these children, though not entirely in my judgment.

While discussing these neurotic complications, I may say that cases of epilepsy have been reported as cured by the removal of adenoids, and it is possible to obtain the same result occasionally in torticolis, and the various indefinite "neck complaints" sometimes noted in children. A. Lawrence Mason reports Bosworth as saying "that asthma in a large proportion of cases is attributable to obstruction of the nose from polypi swollen turbinates and other inflammatory conditions, which through the agency of sensory distribution of the fifth nerve, by reflex sympathy cause bronchial spasms." I am certain this accounts for the cure of asthma sometimes noted in children after adenoids operations. Reflex

nervous symptoms are exceedingly numerous, in fact, so much so that it is even impossible to mention them all. The more common ones I have discussed. This should be emphasized, that when a child below twelve years of age is presented for treatment for any indefinite class of symptoms, particularly of a nervous character for which no well defined cause is found (and sometimes even then) the naso-pharynx should be carefully examined, and if adenoids be found, an improvement if not an entire cure may be expected after their removal.

Diagnosis.—The diagnosis of this important affection theoretically is rather easy; while practically not at all difficult for the expert in throat work, it is at times somewhat vexatous to the general practitioner. There are a few facts, which if the family physician will remember, will in nearly every case cause him to arrive at a correct conclusion.

Even though adenoids are generally so easily detected, the various points in diagnosis should be carefully considered. Aside from the usual symptoms there are certain manifestations which demand special attention, and some which are so important as to require the emphasis of repetition. Among the latter may be mentioned the peculiar adenoid expression which is so often, though not always, present. The various neurosis (and they are legend) attract attention. The little sufferer is frequently annoyed by the "sniffles," is restless and nervous to a more or less extent, is backward, dull and listless in many instances, ear ache and purulent otitis media are frequently observed. The turbinates are often enlarged, and there may be an enlargement of the cervical glands and of the tonsils. Corneal ulcers are sometimes observed in these cases. Their presence may or may not be accounted for by the existence of adenoids. A nasal tone of the voice when pronouncing 99 is more or less noted. Progressive Medicine for March, 1902, says "Huber asserts that reliance may be placed upon two symptoms. First, the presence of two small lymph nodes painless and freely moveable at the angle of the lower jaw, one on either side. Though apt to become swollen with each new catarrhal inflammation of the nose, they return to their former size when the nasal trouble has disappeared, provided a mixed infection has not taken place. Second, upon oral examination and inspection, if the size of the tonsil does not obstruct a view, numerous small lymphoid hypertrophies will be found upon the mucous membrane of the posterior pharynx. Now and then at the level of the soft palate larger masses are present." Bosworth's method of diagnosis consisting of spraying oils into one's nostril and its emerging with equal force from the other is of some value. All these symptoms are more or less pronounced in most patients, while many may be entirely absent in other cases. An inspection of the post-palital space with the mirror reveals the adenoids nestling cauliflower-like on the vault of the naso-pharynx. When one is less expert with the laryngoscope a digital examination is necessary.

To do this the operator should stand behind and to the side of the child with the thumb of the left hand pressing the cheek in between the gum or teeth, as the case may be, thus preventing closure of the mouth, and the right index finger is passed into the mouth and pushes the uvula to one side to prevent its being thrust back and thus interfering. The naso-pharynx is then carefully exposed. By adopting the plan of forcing the patient's cheeks in between the gums or teeth there is no danger from biting and consequently no necessity for wrapping the examining finger for its protection.

Power, of London, mentions six conditions that may be taken for adenoids. These are nasal polypi, fibrous growths in the naso-pharynx, enlarged posterior ends of the turbinate bone, retropharengeal abscess, retropharengeal sarcoma, and to these, in my judgment, should be added encepalocele. Polypi in this location are rare and a careful digital examination will surely lead one aright. Fibrous growths are very hard. Sometimes, particularly in older children, adenoids become exceedingly dense and if one depended entirely on inspection and palpation, might be mistaken for the much rarer fibrous tumor. The history of the case carefully elicited will leave no room for doubt, however. Digital examinations and the symptoms present will differentiate adenoids from an enlarged posterior extremity of the turbinate bone. Retrophageal abscess is very much more painful (adenoids is seldom painful and never acutely so) and infinitely more acute. Location assists here to some extent, as well as the systemic condition of the patient, and the clinical symptoms. Retrophangeal sarcoma, though very rare, must be considered in this connection. Power says that with the malignant growth there is more bulging of the surrounding parts, especially the soft palate. (I have noted this to a very great degree in adenoids), and there is greater enlargements of the surrounding glands. Encephalocele in the naso-pharynx is so very rare and is of such a character as to almost, though not entirely, preclude its being mistaken for adenoids. It must be considered, however, in making a diagnosis.

Treatment.—The treatment of adenoids

is strictly and entirely surgical. Absolutely nothing can be done to relieve the sufferer short of an operation. There is positively no palitave treatment. There is no operation in all surgery from which the surgeon can expect and obtain happier results than from this one. In a few short weeks the whole picture begins rapidly to change. The nervous symptoms subside, the mental lassitude disappears if not too pronounced, the nutrition, as the result of restored digestion, improves, the color returns to the cheek of the little sufferer, all the complications which may exist (ear discharges, etc.), cease, the respiration becomes natural, in fact, in almost a hundred ways the patient is benefited. Unless the operation is done the child becomes "sickly," pale, anemic, has indigestion, develops badly, becomes "pigeon chested," nervous system a wreck, nervous condition below dar, even in some instances idiotic. These children are very much more subject to diphtheria and other infectious diseases, particularly tuberculosis, than those not similarly affected. Lartigan and Nicall have demonstrated that in a certain series sixteen per cent. of adenoids contain tubercle bacili. As a result of adenoids chronic catarrh develops and often partial or total deafness eventually results. These many distressing symptoms demand the prompt, thorough removal of adenoids whenever and wherever found.

The question, and most naturally, which next arises is, Is there any danger from the operation? The answer is double, Yes and no. Yes, and there are two chief sources of danger, viz: Infection and hemorrhage. No, because even the most frequent dangers are really so infrequent, and both even then so easy, comparatively speaking, to prevent or control, that the practical dangers are reduced to *nil*. That there is a possibility of a serious complication or fatal issue should be remembered.

In American Medicine in 1902, Richardson particularly emphasized the very great importance of doing the operation in a strictly surgical way, and particularly in an aseptic manner. To meet the first danger —infection—the naso-pharynx should be thoroughly cleaned with an alkalie antiseptic. This can be accomplished only by thorough nasal douching and naso-pharangeal spraying as may be necessary. The second danger either can be prevented by the proper operation, or remedied by naso-pharengeal pressure correctly applied in connection with the use of indicated and suitable drugs, locally.

The Propagation and Transmission of Malarial and Yellow Fevers.

By D. L. Peeples, Navasota, Texas.

No doubt it would be advantageous to detail a partial chronology of this disease as it has existed in America. In the beginning we may philosophize by asserting that this dreaded, or once preaded disease is as old as matter. In fact we may refer to Gen. 3:6; John 8:44; Rom. 5:12. We note the first authentic appearance of the disease to be observed in 1596 in Central America. It occurred among the New England Indians in 1618, New York was visited by it in 1668, Boston in 1691 and 1692 or 3, Philadelphia and Charleston 1692, the former in 1699. Other epidemics recurred in Philadelphia in 1741 and 1762. New York in 1891. Philadelphia was again visited by quite a severe epidemic in which 4,040 died out of a population of 40,000. From 1793 the disease recurred in the United States up to 1805. after which the United States were comparatively freed from the then deplorable disease from 1805 to 1820, but during the latter year Philadelphia became infected with a most terrible epidemic. Henceforth with slight exceptions, we enjoyed quite an immunity from the disease until 1853. During the latter year the South suffered severely. For instance, New Orleans lost 8,000 inhabitants from the calamitous disease. In fact most of the Gulf States have had more or less attacks of the disease, even as late as 1905, Texas being practically surrounded by yellow fever during the latter year, but escaped all danger due to the wise management of our State Health Officer, Col. Geo. R. Tabor. We could detail numerous tropical diseases transmitted by the mosquito, but for want of space can only allude to the above two mentioned. Fifty-five years ago Dr. Wm. Wood, observed that those who slept under mosquito nets enjoyed to a certain degree an immunity against malarial fevers. Dr. Austin Flint states in his Practice, published in 1894, that "Persons sleeping in an upper story may escape, while those sleeping on a level with the ground become affected." The palmellae described by Salisbury in 1866, and still believed to be true by Prof. Carpenter of Barnes University is only a matter of history. Dr. Carpenter keeps abreast with modern medicine, is a noble and noted genius, though lacking on the mosquito theory, I am proud to acknowledge that I received much information from his recent lectures. We also refer to an article which appeared in the Medical Brief, Vol. XXXIII, No. 12, by Dr. James A. Hopkins, Milton, Del.,

in which he fixes the life of the mosquito at nine days, and dwells upon her non-infectiousness. In contradistinction with present information we boldly assert that the life of the mosquito varies according to the genus from one to several months, that she is the only medium of transmission of malarial and yellow fevers. Approaching the undoubted present theory we advocate the hypotheses, which was gradually concurred in and verified since 1880. When a French army surgeon, Lavern, discovered the protozoa or haematozoon in the blood. He could not account for its introduction into the red blood corpuscles, but realized it to be the eatiology of malarial fevers. About fifteen years later Manson's discovery of the Falaria sanguinis hominis was made known to the world, as well as the great English army surgeon, Ronald Ross, who informed the medical world of the fact that the proboscis of the anopheles was infected with the plasmodium, or malarial parasite, and thus transmitted to man by her bite. About 20 years since Dr. Carlos Finlay of Havana promulgated the theory that the mosquito was the medium of transmission of yellow fever from one patient to another, but was unable to substantiate the fact. However, the honor and great credit falls to the lot of our lamented Major Walter Reed, President of the U. S. A. Board designed for the purpose of investigating the mosquito theory pertaining to yellow fever. It being established beyond any reasonable doubt, and now accepted that the female Stegomyia fasciata is the only means of transmission of yellow fever, I shall detail a few facts as regards the mosquito. No doubt the mosquito will exist as long as the world stands, but we can reduce the various species to the minimum degree. Like other "insectae" they must undergo the stages of ovum, lava pupa and imago," this requiring from ten days to a month dependent upon circumstances, such as season temperature and genus. This transition can only occur in water. The ovi are deposited in water for reproduction, which results in the development of the adult, after which the latter cannot survive longer than five or six days without water.

Remember the mosquito can lay in any kind of stagnant pools of water and hatch under favorable conditions in every character of utensil, vessel, knot holes, stock tracks, and even in the edges of running water. We have known them to lay and hatch in pitchers where water was left for only a few days in our own dwellings, and the buildings supposed to be well screened. "Wigglers" will develop under certain conditions within twelve hours to three or four days. When once hatched the "wiggle tail" can not live submerged longer than from ten to twelve minutes.

The Stegomyia is peculiarly a domestic insect remaining in the neighborhood of residences, and more choice in selecting clean water for deposition of her eggs, while the anopheles much prefers marshy and stagnant water, also exercises a preference for inhabiting swampy regions. Mosquitoes generally, if not blown by the winds, fly but two or three hundred yards. While their ovi hatch from within about 12 hours to several days provided all the surroundings are favorable, however the "wiggle tail" may remain with vitality under unfavorable circumstances without further transformation for a period of about four months, thus being frozen in ice hibernating during such a length of time. Larvæ found in mud holes which have gone dry, for some time, readily resume their vitality shortly after a shower of rain. A meal of blood is necessary prior to the mosquito depositing her eggs. The male lives upon the juices of plants, thus harmless except impregnating the female for reproduction. The anopheles feeds mostly at night though seeks her prey almost any time, and bites with great energy and avidity. The Stegomyia faciata is most harassing and persistent in her deadly work during the day; she becomes infected from twelve to eighteen days after having bitten a yellow fever patient, and this result must be acquired during the first three days of the patient's illness. It is almost impossible for her to accomplish infection from a yellow fever corpse unless it may possibly occur during an autopsy. When once infected from a yellow fever case the Stegomyia remains so the balance of her days, or at least it is most probable. Heavy frosts generally exterminate them, but some infected ones may go into hibernation the latter part of the season, and come out the following warm spring, thus causing another outbreak of yellow fever. An immuned person is not affected by her bites as a rule, except the pain, a non-immune will succumb to her infection within from one to three days and always within the period of five days after infection. No person need be afraid of coming in direct contact with yellow fever patients, even of the most malignant type, nor their corpse, or remaining with them any length of time provided there exist no Stegomyia about the surroundings where the patients may be confined. and provided there have been no other cases in the neighborhood so that the mosquito could not become infected.

The Hygiene and Care of Pregnancy.*

By Charles Adrien Julian, M. D., Chairman Section on Obstetrics, Thomasville, N. C.

A foolish woman once remarked that she always had an instinctive anger against sick people, especially against ailing mothers, for she thought ill health was a mere outcome of wickedness. It was the Creators plan that people should be well, and when they were not so it was simply the result of the violation of some principle of life or carelessness with regard to the rules of health. Foolish as all this may sound, there is yet a grain of truth in it. Much of life's ills could be far better prevented and averted than cured, and perhaps in no line of medical work is this more true than in the subject under discussion—Obstetrics.

The ancients very appropriately had a goddess as well as a god of health and the healing art, inasmuch as the care and preservation of health comes so largely within the natural sphere of woman. And this care ought to be largely exercised at the time of Motherhood. No woman should be ignorant of the dangers, careless of the necessary precautions, heedless of the duties attendant upon pregnancy. Yet many times she is, and it falls to the lot of the faithful physician to watch over, counsel, prescribe, and give such instruction as the case and circumstances require, and maintain throughout the pregnant period some degree of professional attention.

I can but briefly touch upon the main points in this short paper, but they are every one important and much of the woman's future welfare depends upon the watchfulness of the attendant physician in order to avoid the many complications and disorders which are likely to arise during gestation.

In the first place *exercise* is absolutely needful,—exercise as far as possible in the open air. As a rule this is a matter that has to be urged, and where active forms cannot be indulged in, passive exercise should be encouraged. Walks in the open air, driving in the sunshine and amid quieting scenes, sea bathing if prudently managed, and any light and agreeable exercises may be indulged in. Violent exercise, heavy lifting and over-exertion must, on the contrary, all be avoided. A certain amount of healthful exercise is not only helpful in the normal progress of gestation, but it also conduces to easier labor.

Your patient's *diet* must often, of necessity, be regulated. During the early days of pregnancy gastric disturbances will take place. These may take the form of simple nausea and vomiting or of pernicious vomiting (hyperemesis gravidarum), in which case the vomiting is more severe and of longer duration, and the result liable to be more serious. Leading medical minds are beginning to believe and teach that these forms of gastric disturbances are pathological, not as generally supposed, physiologic, phenomena, and the two forms arise from a common cause and differ only in degree.

In the case of simple gastric irritability, both appetite and digestion improve after the fourth month, and little remains to be done except to regulate the patient's diet, in the doing of which some attention should be paid to her likes and dislikes. Any food which is nutritious and easily digested can be recommended, and about the only rule to be laid down in these cases is that the food must all be plain, well-cooked, nutritious, easily digested, and taken at regular intervals. All foods do not agree with all patients, but the matter of proper food is an important one and should have the attention of the skilled physician. Proper diet increases functional activity, augments body-weight, improves hæmatosis, tones up the blood-vessels, builds up the tissues, and relieves much of the susceptibility of the nervous system to pain and irritation. Watching out for over-feeding—that results in toxemia and the over-development of the fœtus. She should be reminded that she is not eating alone for her own sake—there are two involved; and much of the health, robustness and perfection of her future child depends upon her present discretion.

In this age of dress reform, it seems almost superfluous to allude to the necessity of caution in this particular. Yet it is a lamentable fact that women still need counsel upon this subject. In nine times out of ten albuminuria and uremia are results of heavy skirts, tight corsets, or the weight of clothing causing heavy pressure upon the abdomen impeding the proper expansion of the developing uterus and its contents. In Multiparae with lax abdominal walls, it is wise to order the wearing of an abdominal supporter, being careful to see that pressure upon the pelvic and renal veins is not increased. All clothing should be light in weight, and the heaviest garments must be suspended from the shoulders.

Albuminuria reminds us that close watch should be kept over the urinary organs and an examination of the urine should be made about twice a month during early pregnancy and weekly in the last three months. If albuminuria occurs, dietetic and the usual remedial measures should be instituted.

Attention should also be called to the mental condition of the pregnant woman. One of the questions I should like discussed is, To what extent is the unborn child in-

*Read before the recent meeting of the Tri-State Medical Association of the Carolinas and Virginia.

fluenced by the mother's mental condition? That it is to a large extent we know. A lack of mental equilibrium is not uncommon and sometimes its very prevalence results in a failure to diagnose incipient insanity. Some contend that insanity is more frequent when the offspring is male. The type, however, is usually a tendency to melancholia, occasionally a suicidal tendency, and great irritability of temper and disposition. A kindly atmosphere, plenty of outdoor life, judicious amusement, agreeable associations, and a watchguard against all hurtful influences will counteract any harmful tendencies.

Pregnancy always aggravates an existing chronic cervical endometritis, increases the cervical catarrh, the granular degeneration, the secondary vaginitis, and vulvar pruritus. Warm vaginal injections and topical applications of mild astringents and emollients improve the local condition and aid in controlling reflex disturbances.

Use as little medicine as possible. Few drugs are needed, for as Bristow says, "Pregnancy as a purely physiological condition is best managed by a close observance of judicious hygienic rules."

The requirement for rest and sleep, care of the body, useless exposures to disease, obstetrical examinations, and many other details which I have passed over in this hasty introductory sketch of a broad and interesting subject, will suggest themselves to the observant practitioner who is watchful of his best interest, anxious to retain the confidence and respect of his patient, and above all, desirous of obviating unnecessary deaths in child-birth and preserving the health and welfare of coming generations.

The So-called Physiological Cough of Infants.

Thevenet (Lyon Med.) finds that it is of much more frequent occurrence with suckling than with artificial feeding. It is practically unknown in creches. It is a reflex but not a convulsive phenomenon. It is observed as a rule in well-nourished, healthy-looking infants who are steadily gaining weight. From inquiries made from mothers and nurses, it would seem to occur first on the second or third day after birth and to last for twelve months. It is more frequent after the first feeding of the day than after the later ones. In children who are partly breast-fed and partly bottle-fed, it often happens that the cough comes on after the breast and not after the bottle. The cough is associated in many cases with regurgitation of the milk or with actual vomiting of casein; it is found here, as a rule, that the cough succeeds the regurgitation or vomiting and is a sign that these have stopped until after the next meal. In a child who has suffered from the reflex cough, any serious digestive disturbance or general illness causing malaise or loss of weight is associated with cessation of the cough. An improvement in health is often heralded by the return of the cough. Thevenet concludes that the cough should be regarded as a sign of relative surchange of the stomach. It may be looked upon as a favorable indication, but this indication is only a relative one. Its precise significance is the same, only less in degree, as that of the regurgitation which is equally often observed in infants who look quite healthy, but whose feeding is really too abundant or ill-regulated. It indicates that the alimentation is at least sufficient, and that the limit of digestive capacity has been attained. The explanation of the cough is that it is probably an abortive regurgitation, indicating that the stomach will no longer empty itself by the cardiac opening, but has decided on pyloric evacuation; of this the cough is probably not only the signal, but also an auxiliary.

Chronic Alcoholic Leptomeningitis.

Laurie (Australasian Medical Gazette) mentions some of the confusing statements found in the standard writers regarding this disease. Gower says that in chronic alcoholic meningitis the convexity is chiefly involved. The symptoms are headache, slight delirium, mental failure, and slight optic neuritis. Osler says that chronic leptomeningitis is rarely seen apart from syphilis or tuberculosis. Bulloch (Allbutt's System of Medicine) says that apart from the truly gummatous lesions it is possible that spyhilis can cause a chronic indurative leptomeningitis. The usual site is the sulci of the convolutions, more rarely on the base of the brain. The change is essentially a small thickening of the membranes, either diffuse or circumscribed. Oppenheim says that aside from the syphilitic forms chronic meningitis is a rare affection, though it does occur in cases of chronic alcoholism.

He describes three cases, in all of which a necropsy was obtained. In all the thickening was confined to the arachnoid and pia mater, the dura mater escaping. The pia mater was not involved in the sulci nor between the cerebral hemispheres. It did not adhere to the brain substance, as is the case in general paralysis of the insane. The occipital lobes escaped in all cases. The symptoms bore a definite relation to the position and extent of the disease and depended mainly upon the pressure exerted by the thickened and contracted fibrous mem

branes. Headache, vomiting, jacksonian epilepsy, tremors, paresis and incoordination, optic neuritis and delirium, or loss of memory or general mental failure, may be expected in such cases. The three cases recorded by the writer were accompanied by a high temperature near their termination.

The X-Ray Diagnosis of Thoracic Aneurisms.

Baetjer (Johns Hopkins Hospital Bulletin) mentions the importance of diagnosis in the early stages lies in the fact that at the onset remedial measures (diet, drugs, antisyhilitic treatment) are of greatest value. Although a radiograph gives a permanent picture, the radioscopic view is more important. The following method is used. Before examination by the x-rays, abnormalities such as deformities of the spine with consequent displacement, are looked for. The tube is placed at the level of the third rib, from twenty to twenty-four inches away from the back of the patient, both an anterior and posterior view being taken through the fluoroscope. This will permit the examiner to distinguish the relative position of organs as objects appear the larger the further they are removed from the screen. By transverse views we note whether the object is attached in front or behind. The tube is then raised to the level of the sternum. In a normal subject the clavicles, scapulæ and ribs are plainly outlined; in the median line the spine and sternum form a dark band about two inches broad. On the left and below, the pulsating left heart is noted, fusing with the shadow of the diaphragm, and on the right side the right heart and the diaphragm. The aorta is hidden by the spine; in only 1% (thin individuals) is its pulsation seen. Any shadow to the right or left of the ster num is abnormal. It may be due to new growth, enlarged glands, displaced aorta, dilatation or aneurism of the aorta. The shadow cast by new growths or glands is denser than that of aneurisms, its edges are, however, more hazy and irregular; pulsation is a deceptive sign (transmission.) In dilated aorta the shadow disappears between pulsations. Sacculated aneurisms present little difficulty; it is the diffuse which are difficult to recognize early. The shadow persists between pulsations.

Aneurisms of the ascending portion of the aorta cast a shadow more to the right than to the left of the sternum and are nearer to the anterior than to the posterior wall of the chest. Aneurisms of the arch are slightly to the left and reach well into the neck; they also are more anterior. Aneurisms of the descending arch cast a shadow to the left and are nearer the posterior wall. In 104 cases a positive diagnosis of aneurism was made. In 70-75% the cases were sent from the medical division of the hospital with the positive diagnosis of aneurism; in 20 25% the diagnosis was doubtful; in 5% the findings were accidental. Eighteen per cent. came to autopsy, the x-ray and autopsy findings agreeing in all instances. He reports several interesting cases in detail, in which the physical examination showed no aneurism, but the x-ray examination plainly demonstrated the lesion.

Opium in Hypertrophy of the Pylorus in Infants.

Neild (The London Lancet) says that two cured cases of hypertrophy of the pylorus in infants do not justify the claim that opium is a specific in the disease, though they justify the use of this drug in spasm with hypertrophy, and no case should be subjected to operation until opium has been tried. A breast-fed baby aged five weeks had been vomiting since birth and constantly losing flesh. There was constipation with occasional attacks of diarrhea. A few small contractions of the stomach could be made out, although the pylorus could not be felt. Three days later the child was seen immediately after having been fed, and after a few minutes there were plainly visible the characteristic gastric waves and the pylorus was distinctly palpable. One minim of the tincture of opium was added to ten ounces of water, of which the child was given a teaspoonful twenty minutes before each feeding. Under this treatment there was marked improvement and a gain in flesh. The vomiting lessened in frequency and then came on only twice a day. At the end of three weeks the opium was stopped, but the vomiting returned. The opium was again administered, after which there was a perfect recovery.

Another typical case occurred in a patient aged eight weeks who had been bottle-fed from birth. At the end of the first week the vomiting was noticed. There was great emaciation, the gastric wave was strong, and the pylorus was plainly palpable. No change was made in the diet. One-eightieth of a minim of tincture of opium was ordered, which was later increased to one-fourth, followed by improvement in the appearance and vomiting.

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THE MIGROORGANISM FOUND IN SYPHILIS.

Since the report by Schaudian and Hoffman (Deutsche medicinisdie Wochenschrift, May 4. 1905,) that they had found the Spirochaeta pallida in smears from the initial ulcers and secondary eruptions of syphilis in a reasonably large number of clinical cases of lues, the matter has been studied by many competent observers who agree that the organism is present in a large percentage of the cases. On the other hand, it has been found once in the juice of a superficial carcinoma in a patient who probably had not been previously infected with syphilis. A few observers have found what they called this organism (Spirochaeta pallida) in healthy throats. From the tone of the literature, the original reporters have assumed the most reasonable attitude when they merely said that such and such were their findings and, beyond this, claimed nothing. Their findings have been confirmed, but little has been added to prove the causal relation of the organism to lues.

The two facts upon which the claims for its etiological relations are based are that it was found alive in the blood of a four months old infant who had congenital lues, and that Metchnikoff, Roux and Landsteiner found it in the eruptions on monkeys in the same form that they had previously found it in the material used for infection of these animals, before inoculation. While these facts, coupled with the presence of the germ in such a large percentage of cases are suggestive, they do not, by any means, prove that the organism is the cause of the disease. If the present interest and activity in the work continue further proof should not be a long way off.

The Spirochaeta pallida is an animal organism of the group "Flagellata" from 4 to 18 micromillimeters long (circa 1-6250 in. to circa 1-1400 in.) The width varies from an unmeasurable thinness to less than one micromillimeter (1-1-25000 in.) It is a wavy organism having from 4 to 15 curves close together and fairly regular. It possesses two flagella at each end. Being mobile it moves either as a corkscrew without destroying its bends or as a whole with a whiplike action of its poles. It has not been cultivated on artificial media but retains its activity several hours after having been taken from the patient.

The microorganism was originally classed with the bacteria as a vegetable organism; but as there seems to be no cellulose capsule it should be classed among the protozoa. It is usually associated with another coarser and more easily discernible spirochaeta when taken from the surface but is said to be in pure cultures when taken from the deep syphilitic lesions.

The spirochaeta pallida is very difficult to stain, and when stained its extreme delicacy and fineness make it difficult to see. The cause for the declarations of doubt by some observers may lie in the fact that they mistook this coarser spiral (spirochaeta refringens) for the pallida, and the organism found in the carcinoma fluid may have been Spirochaeta refringens.

All we can say today is that the outlook is hopeful for the identification of this animal and syphilis and it is to be hoped that in the future it may be cultivated and made in some way to assist in the production of a curative means against this all too frequent disease.

THE IMPORTANCE OF THE HYDROCHLORIC ACID; SECRETION OF THE STOMACH.

Disease of the Pancreas is rarely recognized during life but its importance for proper digestion and consequent growth and development is undoubted. Cases of infantilism have been reported by Haig and by Byrom Bramwell in which pancreatic insufficiency was the etiologic factor. Recent works on the digestive organs has shown that the proper working of the pancreatic ferments are more complicated than was supposed. Bayliss and Starting have proved that to produce tryptic activity it is necessary that the epithelial cells of the deuodenum and jejunum must be stimulated by the gastric hydrochloric acid for the production of secretion, which being absorbed by the blood stream is carried to the pancreas stimulating secretion. It has further been shown that the pancreas secretes only a tryptic zymogen which is rendered active by the action of another ferment, enteroiknase, which is secreted in the succus entericus. This explains why the pancreas does not digest itself the pancreatic juice being inactive until it enters the intestine. Further it has been shown that though mechanical irritation will cause secretion of mucus by the intestine epithelial the secretion of enterokinase depends upon the presence of the food. Trypsin is an unstable body, rapidly decomposing if proteids or their products are not present and to further safeguard the organism from a tryptic digestion the blood contains "anti-bodies" both for trypsin and enterokinase thus preventing

any excess which may obtain access to the blood stream remaining active.

An interesting fact has been recently confirmed that intestinal worms contain an antibody to enterokinase but not to trypsin with the evident result that they prevent the activation of trypsinogen thus striking at the very foundation of the pancreatic digestive function.

From the above it is evident that a full secretion of hydrochloric acid by the stomach is of the greatest importance as upon its presence depends not only the activation of the pepsin and the inhibition of bacterial growth but also the stimulation of its presence in the duodenum is necessary for the secretion of secretine without which pancreatic digestion is impossible. These physiologic facts explain why so many cases of chronic diarrhoea are benefited by the administration of hydrochloric acid or artificial stomach juices.

THE PHYSIOLOGY OF THE SECRETION OF THE URINE.

In the second Herter Lecture on the Contributions of Pharmacology to Physiology, delivered at the Johns Hopkins Medical School in October, Hans Meyer (*Bulletin of the Johns Hopkins Hospital*, December, 1905) reviews the work that has been done on the physiology of the excretion of the urine. The two recognized theories concerning the excretion of the urine are (1) that of Heidenhaim, which supposes that water, and perhaps salts, pass through the glomeruli and that the specific constituents are added to the water by the epithelium of the uriniferous tubules; and (2) that of Ludwig, which supposes that a highly dilute urine is filtered through the glomeruli from the blood serum and that, as this fluid passes down the uriniferous tubules, the excess of water is absorbed and the fluid is finally concentrated to the point of normal urine. Ludwig and his pupils claim that the filtering process is dependent essentially on the mechanical conditions of the circulation. After reviewing some purely theoretical considerations, the author takes up the experiments of Sobieranski with injections of carmine, which resulted in corrobative evidence in favor of the theory of Ludwig. Sobieranski also concluded that diuretics produce diuresis by inhibiting the absorption of water from the uriniferous tubules. The experiments of Otto Loewi on dogs and rabbits showed that in diuresis the excretion of urea and of chlorides runs parallel to the volume of the urine; but that there is no relation between the volume of the urine and uric acid and phosphoric acid, unless the latter is introduced as a salt into the circulation. The glycosuria following pancreas extirpation is accompanied by hyperglycæmia; that accompanying the administration of phlorizin is not accompanied by hyperglycæmia. In the latter instance the excretion of glucose in the urine is quite independent of the excretion of water. These experiments appear to indicate that substances which exist free in the blood pass out mechanically with the water; while other bodies, such as uric acid, phosphoric acid, phlorizin-sugar and probably the urinary pigments are excreted by special secretory activity. The specific excretion of uric acid, etc., cannot be increased by any of the known diuretics. He then referred to experiments made by removing the medulla of the kidney, which appear to show that water is absorbed from the uriniferous tubules. These experiments tend to show that increased diuresis may depend (1) upon increased filtration through the glomeruli (the more important, and mechanical in its manifestations) and interference with resorption. Other experiments of Professor Loewi give evidence that increased filtration depends upon increased flow of blood through the organ. It appears, for example, that caffeine acts through a local specific dilation of the renal vessels and not through irritation of the cells lining the uriniferous tubules. By this hypothesis it is difficult to explain the constitution of the urine in diabetes insipidus as well as the complete retention of chlorin under certain circumstances. It seems that all experimental evidence tends toward the substantiation of Ludwig's theory.

EFFORTS TO REDUCE YELLOW FEVER OUTBREAKS IN THE SOUTH.

The Health and Commercial representatives of Louisiana, Mississippi, Alabama and Texas, who recently visited the ports of Central America with a view of securing co-operation in reducing the danger of yellow fever, have returned and adopted resolutions urging the Surgeon General of the United States and the health authorities of the Southern States the necessity of appointing a higher type of representatives at various Central American ports so that they can use their influence with the local authorities and maintain a strict quarantine against infected neighbors and protect ports against possible sickness. It was also urged that no detention of freight and passengers except for the purpose of fumigations be maintained against ports known to be healthy, and that the quarantine be applied against passengers but not freight, from ports that have had yellow fever during the last twelve months, and that the Central American Republics be urged through the State Department to adopt modern methods and means of sanitation of all ports.

COST OF YELLOW FEVER OUTBREAK IN MISSISSIPPI.

The Board of Health of Mississippi has made a supplemental report giving a detailed account of the cost of the yellow fever outbreak in that State last summer. This report has been submitted to the legislature and shows that the expenditure made by the Board of Health on account of yellow fever amounted to $43,220 08. A great part of this expenditure was for quarantine guards. There were 837 cases and the fever appeared in fifteen different localities.

NEW HANOVER COUNTY MEDICAL SOCIETY.

This society met in Wilmington January the 29th and elected the following officers: President, Dr. Pride J. Thomas; Vice-President, Dr. S. E. Koonce; Secretary and Treasurer, Dr. R. H. Bellamy.

MEDICAL BOOKS OF 1905: A SUGGESTION FOR COUNTY SOCIETIES.

It is of interest to note that of the American books published in 1905, numbering 7514 new books and 598 new editions, that books on Medicine and Hygiene relatively ranked numerically eleventh, with 349 new books published during 1905 and five new editions. In 1904 the relative rank of Medical publications was 14th. Fiction works naturally lead in both years, comprising more than one thousand each year, or more than one-seventh of the entire books issued. General literature comes second with 684, theology third, followed by Poetry and the Drama, Law, Juvenile, Education, Sciences, Biography, and History, Medicine, as noted, being eleventh in point of numbers. Three hundred and forty-nine new books on medicine in a single year!

The thought of such richness of medical publishing is a bit staggering when one contemplates the impossibility of any individual doctor even keeping in sight of all the record of progress in even a single line of medical advance during the year. From a certain viewpoint it is very flattering to our professional *armour proprie* to realize the great degree of intellectual activity in the medical profession which enables the publishing and circulating of more than 150 medical journals, besides the hundreds of new books annually put forth. From a purely personal standpoint it is a bit discouraging when one realizes that he must necessarily remain ignorant of the contents of most of these volumes, for there is a limit to the amount of time the active practitioner of medicine can give to purely theorectic study.

But while there is a limit, there should be firmly established in the habits of every physician the daily practice of giving at least a medicum of his time to the reading of his favorite medical journals and the perusal of a few new books each year. Without doing both no practitioner can hope to retain his ready command of a knowledge of the best and most approved methods of treatment in vogue, and without the consciousness of possessing this knowledge any physician unavoidably becomes a "doctor behind the times." Once behind, he becomes a purveyor of drugs and a secret enemy of the men of our profession who are constantly studying and endeavoring to uplift medicine as a science, and medicine as an art as well.

There are a not inconsiderable number of the active practitioners of medicine in the Carolinas who are extensive readers and students of the current literature of the profession To such the suggestion is made that one feature of the County Society meetings might with mutual profit be the critical review by such men before the Society of medical books recently read by them setting forth the new facts and affording others a partial knowledge of what is being done in certain particular fields of work. The Buncombe County Medical Society, which contains some of the brightest medical minds of the State, and which Society with its twice-a-month regular meetings, is doing much to maintain a high standard for medicine, began some months ago a series of systematic study of recent physiologic advances with an incidental refreshing of anatomical knowledge which has during the winter months proven quite an attractive and beneficial feature of the meetings. Two leading workers of the Society made it their special duty to thoroughly acquaint themselves with every advance along certain lines and make the demonstrations before the Society. This idea carried out will go far toward making the County Societies what they should be: Real post-graduate centres of instruction.

FOOD ADULTERATION.

The question of adulteration of food is a vital one and has reached a stage of development in recent years which seems incredible to those who have not kept thoroughly posted on this matter. A recent bulletin of the North Carolina Board of Health gives one some idea to what extent our food is being adulterated. In this report we find that 29 per cent. of the vinegar examined was untrue to name; 33 per cent. of the honey was adulterated; 37.5 per cent. of the jellies and jams and every sample of apple butter, catsup and sauce.

In the majority of the States at the present time there is a Food Commission, whose duty it is to keep a watchful eye upon every variety of food sold within the boundaries of the State. Samples are bought in the

open market and carefully analyzed by the chemist of the commission. When adulteration is found the violator is prosecuted. In Massachusetts in 1883 the percentage of samples of adulterated milk was 83. In 1900 the percentage of adulterations in foods dropped from 31 per cent. to 14.

Of all the foods adulterated milk is by far the most common. In Massachusetts three-fourths of the entire appropriation is devoted to the inspection of milk, butter and cheese.

Milk in warm weather furnishes one of the best culture mediums for the growth of bacteria, and therefore any carelessness or neglect on the part of the milker or lack of cleanliness about the cows and containers is sure to result in the infection and growth of both pathogenic and non-pathogenic micro-organisms. This point is fully realized by those handling the milk and is often obviated by the use of formaldehyde and other antiseptics, and in this way they can keep it in hot weather and transport it long distances. This practice should be condemned, for it is a menace to health on account of the physiological action of formaldehyde. Not only is the formaldehyde harmful, but it becomes a substitute for cleanliness and sanitary precautions which are most essential.

An egg may be preserved by evaporating its contents down to the solid state. By maintaining a low temperature the water, which is the largest constituent, is driven off. This preparation is called La Mont's crystalized eggs.

An egg substitute called "orine" is now being manufactured in New York. The analysis shows that it is similar to the elements in white of egg and not the whole.

In the adulteration of coffee a paste is made of chicory, starch, pea meal, caramel and molasses moulded into proper shape by machinery specially constructed for the purpose and then dried. These coffee beans made in this way can be made to imitate almost exactly the coffee bean in the green state or in the roasted condition. The adulterants of ground coffee are peas, chicory, wheat, rye, and bean hulls. So-called coffee compounds are mixtures of coffee with other substances, such as cereals.

Tea is adulterated with soapstone, gypsum, iron dust and sand. It is also mixed with exhausted tea leaves and leaves of the beech willow, elm rose and wistaria. All green tea and a good deal of the black tea is faced or coated to impart a gloss and an attractive color. Prussian blue, indigo and soapstone are used for green teas, and plumbago or black lead for black tea.

The extent to which the adulteration of jam can be carried is well illustrated by the analysis of a sample of strawberry jam in Nebraska. It was found to consist mostly of pumpkin tinted with coal-tar dyes preserved in Benzoin with grass seed thrown in to make the jam look like the real thing.

After reading over this brief account of the means used to adulterate food one may see that not all of the adulterants used could be put down as especially harmful and injurious to health, yet it may serve to impress the fact that unless a careful and strict watch is placed over our food stuffs the more serious and injurious principles used for adulteration are certain to be followed by most disastrous results to the consumer. The most important experiments being carried out at present in this line are those carried out by Dr. Wiley in the food laboratory of the bureau of chemistry United States department of Agriculture, where a squad of men are taking their meals, the food being doctored with borax, salicylic acid and other substances which are said to be deleterious to health.

On February 6th occurred the death of Dr. C. H. Barnhardt at his home in Mount Pleasant, N. C. Dr. Barnhardt was 39 years of age, son of Mr. J. R. Barnhardt. Surviving him are his wife and four children. He graduated from North Carolina Medical College in 1892 and in 1895 from Jefferson Medical College, Philadelphia. Since then he has enjoyed a large practice in Mount Pleasant. Death was due to pneumonia.

THE FUNCTIONS OF THE INORGANIC SALTS.

The principal inorganic salts found in the body which are necessary to life are potasium, sodium, calcium, magnesium, iodin and iron in combination with phosphoric acid, chlorin, carbon diodide and the iodin and iron with an albumin. That they are essential to life has been proven by experiment, animals fed on food free from inorganic salts and distilled water die within twenty or thirty days, as animals will live longer than thirty days without food of any kind, the experiment would seem to prove that the inorganic salts are more necessary to life than proteid, carbohydrates or fats. The explanation advanced by v Bunge is that the death is due to solid poisoning, he points out that as proteid contains from one to one and a half per cent. of sulphur sulphuric acid is formed by oxidation which under normal conditions combines with and is neutralized by the inorganic bases and that v Bunges theory was correct was proved by Lunin.

The inorganic salts can not be considered as a food, being saturated molecules they are incapable of producing protential or

kinetic energy, nevertheless they are present in the body in definite proportions, any wide deviation from which produces pathologic symptoms. During growth certain salts are required for the building of bone tissue and consequently the constituents of mothers' milk should presumably be in the ideal proportions and it has been shown that the ash of young animals, and the ash of their mothers' milk give the same quantitative analytic results. It is easily understood why the infant requires inorganic salts, but for the adult it is not so evident. The salt that appears to be of the greatest importance from the large quantity which exists in the tissues and from the imperative need for it in ordinary diet is sodium chloride. It has been observed that purely carnivorous animals do not crave salt obtaining sufficient for their needs from the blood and flesh of their diet and it is also a matter of observation that savages who live entirely on flesh do not use salt as they usually dip their meat into the blood of the animal, using it as a sauce as well as drinking it; on the other hand herbivorous animals crave salt, thriving much better when fed with it and they will travel very long distances to obtain it. Nations such as the Chinese, Hindoos and Japanese who live almost entirely upon rice set a very high value upon salt, it being used in barter, as an offering to the gods and in many of their religious ceremonies. Water, another food which is not a source of energy, is nevertheless an absolute necessity for the maintenance of life, constituting as it does about seventy per cent. of protoplasm, its functions is to hold in solution the various nutrients and eliminants to facilitate their circulation. Several of the nutrient substances as globulin are only soluble in a weak solution of sodium chlorid consequently its presence in the plasma is of vital importance. Sodium chlorid is also necessary for elimination whenever for any reason there should be an extra quantity of urea to be eliminated, an extra quantity of sodium chlorid is eliminated at the same time. As vegetable food contains more potassium than sodium salts, sodium chlorid is required in excess on a vegetarian diet to assist in the elimination of the excess of potash and also to prevent the potash salts replacing the sodium salts, thus altering the normal relative proportions of the two metals. Probably but few physicians pay any attention either in pathlogic conditions or in prescribing to this very important factor in disease. The deposit of certain salts and substances as bilirubin in icteroid conditions and of calcium salts in atheroma is due to either excess of formation or to imperfect solution and consequent nonelimination. Clinically the very satisfactory results obtained by the administration of inorganic salts of the plasma in their normal proportion in these diseases and in arteriosclerosis prove their great importance to normal metabolic processes.

ARTIFICIAL FEEDING.

The mortality of artificially fed infants is so great that proper feeding with the best nutritive substitute for their natural food has become a matter of the greatest national importance. The increase in the number of women who refuse to suckle their infants is undoubtedly due to artificial causes, as the percentage of women in maternities who are unable to perform this first duty of a mother is very small compared to those who have recourse to artificial feeding outside of the hospitals. The tendency of the day is for women to neglect their family duties of all kinds, excusing themselves under the plea that it is a step towards the 'emancipation of their sex.' Another obstacle with which the physician has to contend is the monthly nurse, who, looking to her own ease and comfort, rather than to the health of her charge, lends her support to the mother's wishes, a combination of forces against which the physician is usually powerless. Under these social conditions everything should be done to procure a substitute as nearly like the natural food as possible. Cow milk is the only available substitute, but it has to be born in mind that no amount of 'doctoring' or chemical manipulation will convert cow into human milk the differences being fundamental. The caseinogens of the two milks differ in their reactions and probably in their chemical constitution, that of human milk for a floculent and more easily digested clot with rennin, it is more difficult of precipitation with acids and more easily soluble in excess, it is more difficult to precipitate with salts, gastric digestion of the caseinogen of cow milk yields pseudomucin which human caseinogen does not, in human milk 41.5% of the phosphorus is in combination as phospho carnic acid, in cow milk only 6%. Both cow and human milk are amphoteric containing both alkaline and acids salts, it requires on an average 41ccn-10 alkaline solution and 10.5ccn-10 acid solution to neutralize 1000cc cow milk while human milk requires 10 8ccn-10 alkaline and 5.6ccn-10 acid solutions for neutralization, showing that the proportion of alkalinity to acidity in human is greater than in cow milk, further cow milk contains 7% volatile fatty acids, human milk 1.4%. The melting point of the fat of human milk is 34 degrees, of cow milk 29 degrees. The proportions and the total

amount of the inorganic salts also differ being about one-third less in human milk. Besides these variations in the chemic characteristics of the various constituents the percentage contents of the proteids, fats, and sugars are very different. For practical purposes the following percentages may be taken as a standard: Human milk, proteid 2%, fat 4%, sugar 6.6%, cow milk, proteid 4%, fat 2%, sugar 4.4%, so that to modify cow milk, so as to approximately resemble human milk dilution is necessary with the addition of both fat and sugar. The most simple method is to allow the cow milk to stand for about three hours in a graduated cylinder with a stop cork at the bottom, to the upper 5 oz. or topmilk, add 1 oz. of lime water, 14 oz. of water and 6½ drachms milk sugar, this mixture will give a percentage value of proteid 1%, fat 2%, sugar 5%, which is strong enough to commence with, every two or three days the strength can be increased by deducting 1 oz. of water and increasing 1 oz. of topmilk, until the proportions are topmilk 10 oz., lime water 1 oz., water 9 oz., sugar 6½ drachms, which gives a percentage of proteid 2%, fat 4%, sugar 6%, more cream being added if the infant is constipated and more sugar if it does not thrive. If it can be avoided milk should not be sterilized or pasteurized. Unless the boiling is very prolonged, the peptonizing organisms of Flueger, Gaertners bacillus and Kleins enteritides sporogenes are not destroyed, while the comparatively harmless lactic acid forming bacillus which has the advantage that by its presenee gives warning if the milk is sour, the bacillus tuberculosis typhosis and coli communis are practically destroyed; further it must be remembered that no amount of boiling will destroy the toxins already formed. If it is necessary to boil the milk it should be cooled quickly, also lime water added in larger proportion than in the above formula as the calcium salts are precipitated by boiling, interfering with the action of the rennin ferment, after boiling the milk loses much of its antiscorbutic property which can be counteracted by the administration of a little fruit juice. Barley water may be substituted for water as a dilutent, not for any benefit to the baby, but to calm the mother's fear that the child is being starved on milk and water. As it is not common for dairymen and nnrses to boil stale milk, the following test is of service in determining if milk has been boiled: To a specimen of milk add some freshly prepared tincture guiacum, then add a drop or two of hydrogen dioxide, if the milk be fresh a blue color appears, if it has been previously boiled no coloration will take place.

OSTEO-ARTHRITIS OF THE SPINE.

As a result of an analysis of one hundred and thirty-one cases of osteo-arthritis of the spine, Don Carlos Guffey (*University of Pennsylvania Medical Bulletin*, November, 1905) has given some interesting deductions. About seventy-five per cent. of the cases occur in men, and fifty per cent. occur between the ages of twenty-five and forty-five ycars. The most constant antecedent factor seems to be exposure to cold and wet; the next most constant factor is traumatism. It appears to be a disease of the poorly nourished, the unhygienic, and the careworn. Certein of the infectious diseases, such as gonorrhoea, influenza, tuberculosis, and rheumatism appear to have some etiological relation to the incidence of the disease. The onset of the disease is gradual, with pain in the lower part of the back, which is sometimes spontaneous; but which may be brought out or increased by pressure; it is worse after rest, and improves on movement. Among the later symptoms are spinal rigidity, spinal deformity, such as dorsal kyphosis and a loss of the normal lumbar lordosis. The gait is stumbling, irregular, and difficult; the chest and pelvis are often flat; exostoses are frequently found; an anchylosis may occur in other joints and there may be muscular atrophy. There are two forms of the disease: First, that which occurs in children with enlarged spleen and enlarged lymphatic glands (Still's Disease.) Second, the adult form which may be accompanied by atrophy of joint structures and ligamentous thickening without osteophytes, (atrophic form) or by nodosities and exostoses (hypertrophic form.) The condition is to be diagnosed from Pott's disease, pachymeningitis, occupation, kyphosis, hysteria, and osteitis deformans of the spine.

The constitutional treatment of the disease consists in the administration of nutritious food, warm baths, and tonics such as cod-liver oil, arsenic, and strychnine, and placing the patient in an environment in in which he can get plenty of fresh air and sunshine. The local treatment includes the application of mechanical support to the spine, either by plaster casts or special apparatus, electricity, and massage.

Review of Southern Medical Literature.

The Mobile Medical and Surgical Journal, January, 1906.

Present Status of Water Analysis in Connection with the Investigation of Typhoid Epidemics.—Dr. E. C. Levy explains fully the following statements in this paper.

(1) No satisfactory method is known for the detection of B. typhi in water. (2) Were such a method known it would be of limited application on account of the fact that when an outbreak of typhoid fever leads to an investigation the water supposed to have been infected is no longer available for examination. (3) Although the direct detection of B. typhi in water is impossible yet the importance of bacteriological and chemical examination of the suspected water must not be underestimated, but it should be combined with a thorough sanitary survey of the field and a competent study of the phases of the epidemic. This will almost invariably solve the question whether the outbreak was caused by drinking water. (4) This method of attacking the problem has the further advantage of throwing light on the sanitary quality of the water in question apart from the special outbreak of typhoid fever, and, moreover, if it is found that the water is not responsible or responsible only in part full information will be gained along many lines, thereby suggesting the steps to be taken for future protection.

The Virginia Medical Semi-Monthly, January 12th, 1905.

Principles of Surgery, Lecture XIV—Ulceration and Ulcers—Importance—Frequency—Causes—Varieties—Diagnosis—Prognosis—Treatment—Fistula and Sinus.—By Dr. Stuart McGuire, Richmond, Va.

Quinsy; Its Diagnosis and Treatment.—Dr. C. M. Miller says the diagnosis can often be made from the attitude of the patient when he first appears at the office. The head is held rigidly upon the neck, face usually turned to the affected side with speech thick and muffled, having something of a nasal tone. Upon examination jaws are rigid, breath fetid and the impossibility of swallowing solid food on account of pain with history of sore throat and possibly a chill are given as previous history. A bulging of one side of the soft palate with its tonsil will indicate the location of the trouble, for it is seldom bilateral. Palpation with the finger may give signs of fluctuation. Quinsy will be differentiated from latero-pharyngeal phlegman by the swollen, boggy neck, and the detection of pus behind and outside the tonsil, in the latter when combined internal and external palpation is used. The preventative treatment of peritonsilar abscess consists in the relief of any constitutional dyscrasia and the removal of enlarged tonsils. The abortive treatment consists of an incision into the peritonsillar tissue to reduce the local congestion and relieve tension. Following incision rest in bed and free saline purge should be given with the internal administration of guaiac, together with the use of the ice bag externally. If a gargle does not cause too much pain hot salt and water will do as well as any other, provided the water is as hot as can be borne.

If the patient is not seen until three days after the beginning of the attack abscess is almost certain to have formed. If not located by examination it is better to begin on a level with the base of the uvula and one-half inch external to it and go downward and slightly inward for about one half inch. The large vessels are pushed so far outward and backward by the collection of pus that there is but little danger of wounding them, yet the incision should not be of any greater depth than the cutting edge of the knife with a blade of about one-half inch on its cutting edge.

Pus will frequently gush out upon making the incision, but should this not be the case do not explore further with the bestowry but introduce a narrow-bladed angular dressing forceps into the incision already made. This can with safety be pushed out into the soft tissues till the abscess cavity is entered, then opening the blades and withdrawing them while open and sufficient vent for complete drainage is left.

Sometimes pus is merely imprisoned between the tonsil and the anterior pillar, in which case the pulling forward of the pillar will evacuate the abscess and result in cure without further intervention.

The Southern Clinic, January, 1905.

Some Observations on Pus-tubes.—Dr. Emory Lanphear states that pain in the region of the liver in a woman known to have pelvic inflammation should always be looked upon as a symptom pointing to the formation of pus in the Fallopean tube. Sometimes after the acute attack of gonorrhea in the female the patient complains of pains in the pelvis and the local physician finds retroversion with adhesions. If he is successful in his treatment with tampons douches, etc., the attack ends with simple closure of the fimbriated end of the tube (with subsequent sterility) and no abscess; if unsuccessful chronic pelvic abscess develops with a life of invalidism or operation. Gonorrheal closure of the tube prevents access of the ovum to the tube and uterus, even though it may not invalidize the victum. This is the reason why prostitutes so seldom have children—a wise provision on the part of nature to prevent the birth of too many degenerates. Gonorrheal salpingitis is more prominent as a cause of race suicide than abortions, withdrawal, or other means of preventing conception. Pus in the pelvis following abortion often empties itself into the rectum, uterus or

vagina and complete restoration to health follows; with pregnancy later in life. In other words infection with pus germs (the streptococcci and staphylococci) does not necessarily mean radical operation or sterility; gonococcus infection almost invariably means sterility and often necessitates operation.

New Orleans Medical and Surgical Journal, January, 1906.

Amputation of the Cervix Uteri for hemorrhage complicating chronic metritis.—Dr. C. Jeff Miller believes that the indications for treatment of persistent hemorrhage from the uterus are clear when the cause is found to be fibroids, placental masses, malignant growths, tubercular ulcerations, etc., but when changes takes place in the myometrium either as a result of developmental defects, infection, or the natural phenomena attending the preceding of the menopause, the pathology is by no means well understood, nor are the indications for treatment well defined. Attention is therefore directed to the class of cases generally described as endometritis and curetted one or many times without the slightest benefit. The main symptoms of chronic metritis are menorrhagia, intermenstrual hemorrhage and leucorrhea, although every sign may subside for months. After quoting Theilhabee's clinical observations and various other authorities in this line he concludes by saying that a review of the opinions of various authorities leads to the practical conclusion that in many cases of persistent bleeding in so-called chronic metritis we are dealing with disturbed vascularity rather than inflammatory changes, and the indications for treatment are to restore the equilibrium until natural compensatory atrophy occurs. The surgeon must carefully discriminate between cases due to disturbed vascularity and to infection when advising radical operations; for since hysterectomy has become the generally accepted treatment for infected cases the uteri of many women are probably unnecessarily sacrificed.

When the appendages are diseased and the physical signs point to long standing inflammation total ablation is to be considered, but when such complications can be eliminated in any uteri it can be at least partially saved and the post operative dangers considerably reduced by removing the cervix and securing the vessels which control the major blood supply of the uterus. Deep cervical tears which extend into the base of the broad ligament frequently give rise to persistent hemorrhage and can be treated in a similar manner with corresponding results. After high amputation of the cervix in these cases menstruation becomes regular, less profuse, less frequent and sensations of pain and weight in the pelvis disappear. It is believed by Petroff that it does not prevent pregnancy, but does diminish the chance of conception; that in the first half of pregnancy abortion if as frequent as with deep lacerations; that false pains occur during the last month of pregnancy, and gestation rarely continues to term. Such conclusions bar the operation in young women, except in aggravated cases.

The Texas Medical News, January, 1906.

When to Operate in Appendicitis.—Dr. H. B. Hill says with such a wide variance in the advice of high authorities the practitioner of more limited experience is frequently at a loss to decide what course to pursue, and either follows the plan laid down by his favorite text-book or else procrastinates until the golden time, i. e., the first thirty-six hours is past. My experience is perhaps not wide enough to give my individual views much value, but after much study of the literature and cases at the bedside I have come to the following conclusions:

1. All cases should, if possible, be operated upon in the first twenty-four or forty-eight hours.

2. Cases seen later, or from any cause not operated upon earlier, if not of very severe type might be safely operated upon several days later. Those of more severe character that are not relieved by the Oschner treatment after being tested twenty-four or thirty-six hours should be given the benefit of an operation, for it is better to say "that he died in spite of the operation" than "that he might have been saved by an operation."

3. I advise all of my patients that have gone through a distinct attack of appendicitis without having been operated upon to have it done within a short time after recovery; and also say to them should they neglect to have it done in the interval by all means be operated upon during the first thirty-six hours of the next attack.

Rheumatism as a Factor entering into Eye and Throat Diseases.—Dr. Crittenden Joyes recommends salol and the salacylates and painting, with silvernitrate after cleansing the tonsil in follicular tonsilitis. In scleritis episcleritis and in sclero-kerotitis are also considered of rheumatic origin. Iritis is sometimes a manifestation of rheumatism and not merely a complication. In this form of iritis the symptoms frequently keep up for a long time after full dilitation whereas in syphilitic or simple intis they generally give way. Another eye trouble

which seems to be due to rheumatism is a conjunctivitis which is confined to the eye ball and is accompanied by a watery secretion with engorgement of the deep vessels, pain and tenderness. This is called catarrhorheumatic opthalmia by the English. Many cases of apparently simple conjunctivitis in which all the errors of refraction had been corrected and which would not yield to local treatment, but were relieved after a day or two under the salicylates. There are also those cases that complain of burning pain and tenderness in the eyes and present absolutely no objective symptoms, and yet treated with a simple eye wash and appropriate rheumatic remedies the symptoms disappear.

Texas Medical Journal, January, 1906.

Nervous Dyspepsia (Neurasthenia Gastrica) Its Diagnosis and Treatment with Report of Cases.—Dr. John T. Moore, after giving the etiology, symptoms, and reporting cases, gives the following under treatment: A careful study of the stomach contents should be made so as to arrive at a correct idea of the stomach secretions and functions. In the majority of cases the stomach symptoms are secondary to a general neurosis, hence all plans of treatment must be directed to the rebuilding of the nervous system.

Sleep and rest are necessary before improvement can begin. The wet pack will do more to produce sound, restful sleep than many of the sleep producing drugs. One must invariably be removed from all irritating influences and cares of business or of the household.

A morning bath in cold water and a vigorous rub with a coarse towel is of much benefit. Some cases do better under the influence of the cold sheet and then vigorous rubbing. Many of these cases have been placed on a starvation diet, thinking they could not digest a general diet. Most of these cases can digest pretty nearly everything. They certainly do so after treatment. A highly nutritious diet is necessary. Stomach lavage six or seven hours after meals twice or three times a week helps a great deal. The stomach being washed out after the evening meal. Massage and electricity are excellent measures. The bowels must be looked after carefully, as quite a few of these patients suffer from constipation. Tonics are of great service, especially nux vomica, condurango, and the glycerophosphates. Iron and arsenic are good to give in cases of anemia, after there is improvement sufficient to allow patient to go out sea bathing about three times a week, preferably early in the morning before breakfast is of great benefit. Fishing should be encouraged—it occupies the mind sufficiently to prevent self examination. Encouraging words from the doctor is one of the most helpful measures. Take occasion every now and then to assure the patient that he is going to get well, and show whenever you can that he has improved.

The Medical Recorder, January, 1906.

Observations made from the Epidemic of Yellow Fever of 1905 and Prophylaxis to be taken in future Epidemics.—Dr. James Waldower says that prior to the demonstration of the infection of yellow fever by the mosquito we were fighting an unknown enemy, and as a result our systems of quarantine and prophylaxis were crude and deficient and as a result of this ignorance each community added to the horror of the disease to prevent its spread. The barbarous shot gun quarantines—and, strange as it may seem though it has been five years since the doctrine has been demonstrated and proven in 1905 many of our learned men of the profession still cling to this barbaric custom. The United States Marine Hospital and Public Health Service should have complete control of the maritime quarantine while the State Board of Health should make the laws for all within its domain, and each county and municipality should be governed by it. This would abolish the commercial quarantine, which is only too often taken advantage of. Fear of fever in former years was a secondary consideration in comparison with the greater fear of quarantine. In the present light before us there is no reason why commercial intercourse should not be continued with all localities infected with yellow fever as to the interchange of freights; but let the embargo go on as to the ingress of people to and from such infected localities. Place a guard around an infected city and if necessary let them be ten feet apart so as to prevent the spread of disease. In addition in all places where the Stegomyia has its habit at see to it that the insect is destroyed, both in its maturity and in the larval stage. Since the mosquito in all his stages is definitely known, there is no reason why a community could not get rid of this pest, if for comfort alone, without any sanitary measures connected therewith. Then should a case of yellow fever be introduced into a community with the Stegomyia absent you need have no fear of spread, for without the mosquito you can have no spread of this disease. While all communities should have clean streets and alleys the garbage removed therefrom is not a menace to the public that this little insect is, and that has been ignored in former years.

Gaillard's Southern Medicine, January, 1906.

Plastic Operations for Acquired Defects of

the Lips.—Dr. J. Shelton Horsley recommends the operation of Sodillot as the most useful in repairing the upper lip. In a recent case of cancer the right half of the upper lip was excised in a quadrangular mass and the flap to correct the defect outlined by three incisions. The first starting at the corner of the mouth was carried downward and forward to the right side of the chin, the second parallel to the first and about one and a quarter inches posterior to it, began about the level of the mouth and ended half inch before the level of the termination of the first incision. The third incision connected the lower ends of the other two. The flap so outlined was dissected up, taking in the whole thickness of the cheek. It was then sutured into the defect made by the original excision. In remedying defects of the lower lip the simple V shaped excision does very well if the base is sufficiently broad to extend one quarter of an inch beyond any sign of cancerous infiltration. The apex should always extend to the lower level of the chin. If the wound is not readily coated the lip should be freed at the point of tension. By extending two lateral incisions from the corner of the mouth outward this V shaped piece can be made to include two-thirds of the lips without too great tension. When, however, so much of the lip is involved a quadrangular flap can be taken from the upper portion of the cheek, after the method of Bruns, by making a straight incision upward and inward from the angle of the mouth going through the whole thickness of the cheek and extending along the nasolabial groove, the second incision being made about one and a quarter inches posterior to the first and parallel to it but extending to a higher level. The ends of these were joined by a third cut and the flap was turned into the defect. The success of all plastic operations depends upon the mechanical ability and anatomical knowledge brought to bear, as well as upon the other details involved in the operation. The nutrition of the flaps is the most desirable object to be obtained and with the kind of sutures and the form of dressings employed goes to make up success or failure to a greater extent in the plastic operations than in other surgical procedures.

Atlanta Journal-Record of Medicine, January, 1906.

Conservative Gynecology.—Dr. W. A. Verdier in his resume of this subject points out the following: A neuresthenic anemic woman always suffering from her ills and incapacitated for any service may all be caused by an atrophic ovary. In those individuals who have been incapacitated by diseased ovaries after the removal of an ovary will regain their usual vigor, their sexual appetite returning and if part of the ovary is left stand far better chances of bearing. The painful scar in hysterectomy formed in the superior surface of the cul-de-sac just posterior to the cervix where the nerve supply is less than any other part of the vagina will at times give a sense of pain for which there is no relief.

Complete castration of young women is the cause of another distressing condition. The first year after operation patient is nervous and unfit for anything on account of the premature menopause. When she seems to be fairly well of this nervous condition she apparently improves very rapidly; her weight will probably exceed all previous records and her complexion superb, but she will tell you that her nerves are in a most wretched condition, and monthly when she should menstruate her distress is unbearable. There may be effort at vicarious menstruation, bleeding at the ears and nose and even sloughing of the tonsils. Examination of the blood shows a pathognomonic anemia, which resists all treatment. Palliative treatment is all that can be done. Deplete the system with salines, commencing a few days, if possible, before the expected attack, reducing blood tension. Diuretics should be freely administered, the nervous conditions controlled by such somnifacents as do not depress secretions as chloral bromides and even byocine. Morphine should never be allowed.

Maryland Medical Journal, January, 1906.

Cancrum Oris.—Dr. Jas. D. Morgan points out that recent investigation seems to show that in many cases the scrapings of the tissue will show bacilli very closely resembling the diphtheria bacilli. The diagnosis is not made from the history of the case, but from the appearance and feel of the cheek, with absence of local pain and the distinctive odor of the part.

The treatment is supportive, hygienic, and local. When we consider that about 90% of the cases die in from a week to ten days our treatment has to be heroic and energetic. In suppurative and gangrenous cases the patient can take liberally of whiskey, milk broths, strychnine, iron, and in fact anything which is nutritious. Scrupulous attention should be paid to the mouth and fauces by antiseptic but bland washes and sprays. The region of the slough on the inside of the cheek should be thoroughly curetted or excised or the Paquelin cautery may be used. The child should, if possible, be given a general anesthetic and the gangrenous portion and beyond it ex-

cised, using the cautery to prevent bleeding wherever possible. The danger of complications throughout the whole disease is very great, especially from septic pneumonia and colliquative diarrhea.

Virginia Medical Semi-Monthly, January 26th, 1906.

The Management of Normal Labor for the Prevention of Puerperal Infections.—Dr. Herbert Old under the section on vaginal douches says the normal vagina contains no pathogenic bacteria; its secretion has strong germicidal powers, proven by the fact that it is able to destroy pure cultures of the most virulent and ordinary pus forming micro-organisms in from eleven to twenty hours, whereas after an antiseptic douche it would take from nineteen to thirty-six hours to accomplish the same result. The streptococci that may be present are not virulent and behave as saprophytes upon healthy tissues; but they can become infectious when the resistance of the tissues with which they are in contact is diminished.

Pneumogastric Cough.—Dr. C. P. Jones reminds one of the fact that after finding no cause for a cough in the lungs or air passages we should examine the external auditory canal for a plug of wax, a lead pencil point, a bean, or any other hard substance which may irritate the auricular branch of the vagus and thus produce cough. Also the naso-pharynx should be carefully examined for adenoids. Septal spurs, enlarged middle turbinated bone pressing against the septum and rhinitis should be looked for. Lymphoid patches on the pharyngeal walls, varicose veins, also atrophic pharyngitis must be considered as factors. The tonsils give trouble, especially the broad, flat submerged organ with adhesions to the pharyngeal pillars. All tonsils of this character should be removed; certainly the adhesions should be freed. The lingual tonsil is very apt to be overlooked, also sensitive papillar in the glosso-epyglottic space. An elongated or hypertrophied uvula, especially one that is extremely sensitive to touch, should have a portion of its bulk removed. Papillamatous growths on the uvula should be removed.

The Alabama Medical Journal, January, 1906.

The Present Status of the Surgery of the Stomach.—Dr. W. D. Haggard gives the indications for operating, also the technique, and quotes from the best authorities in this work. He believes that the most crying need in all medicine is some means for the early recognition of cancer of the stomach. The early diagnosis of the other great scourge of mankind—tuberculosis—is satisfactory, but unfortunately there is as yet no radical cure for it. If it were possible to diagnose gastric cancer in its very incipiency a very large number could be saved by operation. The anatomic and lymphatic conditions are very favorable for an idealy early operation. One-third of all carcinoma are in the stomach. The average duration of life is nine months. Diagnosis by medical means is usually too late, unless it is made by a strong surmise and confirmed by exploratory incision. Laboratory methods are unavailing in the operable period, as no change has taken place in the secretions. Any obscure digestive case where pernicious anemia is excluded, and especially if HCl is absent, demands exploration. Riegal asserts that better results in gastric cancer will only come when the internist acquires the diagnostic courage necessary to enable him to act on that suspicion before it becomes a certainty. Persistent digestive cases should be watched carefully for a few days or weeks only. If there is progressive but slow development of disordered function with pain or vomiting, impaired secretion, emaciation, and especially tumor the wisdom of prompt exploration should be frankly put before the patient. If exploration proves the condition inoperable the wound should be closed and the patient gotten up and out of the hospital at the end of the week. If obstruction is serious a quick gastro-enterostomy is relatively safe. Relief from pain and vomiting is most grateful and life is often prolonged for many months and in a good many instances to a year or longer. The danger of an exploration is not *per se*, but in ill-advised and over-zealous efforts to attempt interference in conditions that should be left severely alone.

The Southern Practitioner, January, 1906.

This issue contains a stenographic abstract of the proceedings of the Southern Surgical and Gynecological Association at the eighteenth annual meeting held in Louisville, Ky., at the Seelbach Hotel, Dec. 12, 13, and 14, 1905, under the presidency of Dr. Lewis C. Bosher, of Richmond, Virginia.

Memphis Medical Monthly, January, 1906.

Splenectomy—Report of a Case.—Dr. G. H. Wood reports the following case: Mrs. O. B.; aged 30, never pregnant. Spleen began to enlarge at 14 years of age, but was not uncomfortable until two years ago, when it began to enlarge rapidly. Eyes began to trouble her at the same time; reading or sewing causing pain; conjunctivae became congested. He explained the pain as a drawing sensation in the eye ball, also difficulty in holding eye lids wide open. During August 1904 began to have rigors

followed by neasua and fever. Rigors occurred every two or three days. Calomel and quinine relieved this for two or three weeks. Spleen became so large that she could not lie on back or right side without pain. In November, 1904, the spleen was removed by Dr. W. W. Taylor, of Memphis. It was a simple hyperplasia, possibly due to malarial infection. Made a beautiful recovery and left hospital in four weeks. In January, 1905, began to have rigors, fever, sick stomach, fever sometimes reaching 103 degrees F., lasting only a few hours. Blood examined, but no malarial plasmodia found. Appetite good, but not abnormal. Lost 25 pounds in weight. Had weighed 165 pounds. After taking calomel followed by castor oil and turpentine repeatedly on February 20th she passed a Tema Solimn. Rigors and fever stopped at once, eyes began to improve and were perfectly well in a few weeks. On the 10th of August, 1905, began a typical case of typhoid fever lasting five weeks, temperature ranging from 100 to 103 8 degrees F. Blood gave typical Widal reaction the second week. From the symptoms there was no doubt of it being typhoid in its most typical form. She made a good recovery and is now in perfect health.

The whole field of medicine and surgery is simple and easy on paper, but the bed side and operating table experience is quite a different proposition. This case illustrates the necessity of closely observing eye symptoms in constitutional disorders. It also illustrates the folly of supposing every case of rigors and fever to be due to malaria.

Southern Medicine and Surgery, January, 1906.

The Treatment of Pneumonia.—Dr. J. H. Atlee says in children as in adults broncho or lobular pneumonia is not essentially a systemic disease, and its influence upon the nervous and muscular as well as the cardiac systems is not so marked as in the lobar or interstitial forms of the disease. The danger may come from the heart, but it is more due to a collateral congestion and oedema resulting in suffocation. The child must be put to bed at once. The temperature of the room should be about 68 or 70 degrees. The diet must be liquid from the beginning —milk broths with plenty of water. The position of the child must be frequently changed. As to local applications in the way of counter-irritation poultices while effective are heavy and troublesome to apply. A mustard paste composed of mustard one part and flour six parts and applied to the entire chest is perhaps the most satisfactory. It should be removed after the skin is thoroughly reddened and reapplied in the course of three or four hours. In the interval a layer of cotton covering of oil silk can be applied.

For stimulation strychnia and digitalis are indicated. Expectorants are rarely indicated. To allay the cough heroin and codine in small doses will probably give the best results. To allay the restlessness phenacetin and bromide of sodium will act with good results. To overcome high temperature do not give antipyretic drugs—these react upon the heart which is already weakened. The application of cold by sponging or packs is the best of all antipyretics. Attention first and last must be given to the bowels that they are kept open, and calomel followed by oil meets every indication, the physician being governed by the symptoms of the case when to administer them.

Remember in the treatment of these troubles in children the chief dangers are heart failure and suffocation, with possibly an extension of the toxines to the kidneys producing a nephritis and labor to keep ahead of the trouble.

Nashville Journal of Medicine and Surgery, January, 1906.

Leukemia.—By Dr. Frank Swope, Carthage, Tenn.

The Louisville Monthly Journal of Medicine and Surgery, January, 1906.

Thoracic Resection for Tumor Growing from Bony Wall of Chest.—By Dr. W. O. Roberts, Louisville, Ky.

Book Notices.

The Eclectic Practice of Medicine. By Rolla L. Thomas, M. D., Professor of the Principles and Practice of Medicine in the Eclectic Medical Institute, Cincinnati, O.; Ex-President of the National Eclectic Medical Association; Consulting Physician to the Seton Hospital. Illustrated with two lithographs in colors, 6 color prints and 57 figures in black. 8th vo., 1033 pages. Price: Cloth, $6; Sheep, $7. The Scudder Brother's Company, Publishers, No. 1009 Plum Street, Cincinnati, Ohio.

Eclecticism has, as the author states in his previous work, won its way into homes of many thousands of people. The methods of this school are being examined and tested as it never was before, and men from all schools are recognizing the efficacy of many parts of their materia medica. The author states that most of the material used in this volume is not new and further states that when once the relation of drug action to diseased conditions is found, it is found for all time; that an agent that will correct a specific condition for today will correct the same condition tomorrow, next year or a

hundred years hence; therefore many of the remedies used twenty-five, thirty or fifty years ago are used today. The etiology and pathology must necessarily be the same on all works on practice, and there is very little difference between this work and the works on the same subject in the regular schools of medicine. The book is very attractively gotten up and is well written. It will evidently be a great addition to the literature of eclectic medicine.

International Clinics. A Quarterly of Illustrated Clinical Lectures and Especially prepared original articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to Students and Practitioners, by leading members of the Medical Profession throughout the world. Edited by A. O. J. Kelly, A. M., M. D., Philadelphia, U. S. A., with the Collaboration of Wm. Osler, M. D., Oxford; J. B. Murphy, M. D., Chicago; John G. Clark, M. D., Philadelphia; J. W. Ballantyne, M. D., Edinburgh; Edmund Landoldt, M. D., Paris; John H. Musser, M. D., Philadelphia; A. McPherson, M. D., Toronto; Jas. Stewart, M. D., Montreal; Thos. M. Rotch, M. D., Boston; James J. Walsh, M. D., New York; John Harold, M. D., London; Richard Kretz, M. D., Vienna. With regular correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels, and Carlsbad. Vol. IV. Fifteenth Series, 1906. Philadelphia and London: J. B. Lippincott Company. 1906.

Volume IV of the Fifteenth Series of the International Clinics reached us a little behind time on account of the strike among the printers in Philadelphia. This volume is possibly the most valuable of any one of this series that we have ever had the pleasure of examining. The illustrations in this volume are especially fine and many of the writers represented here are authorities on the various branches on which they write.

Transactions of the Medical Association of the State of Alabama. (The State Board of Health). Organized 1847. Meeting of 1905. Montgomery, April 19-22. Montgomery, Ala: Brown Printing Co., Printers and Binders. 1905.

This Association gets out one of the best volumes of Transactions of any State in the south and we know of no State north that gets out a more attractive volume. The volume this year has 590 pages. It is carefully indexed and attractively bound.

Transactions of the American Surgical Association. Volume the Twenty third. Edited by Richard H. Harte, M. D., Recorder of the Association. Printed for the Association. For sale by William J. Dornan, Philadelphia. 1905.

The Transactions of the American Surgical Association comes to us in a handsome volume of about 400 pages. It contains many beautiful illustrations and papers by some of the most distinguished surgeons in the world. Dr. Albert Vander Veer is president, and Dr. Dudley P. Allen is secretary. The editor has gotten up a very attractive volume—he has done his work well.

Lincoln's Kentucky Birthplace.

One hundred years ago this month of March, Thomas Lincoln, of Virginian birth, laid claim to a little farm in the center of which was a noted spring, sheltered from the summer suns by a shelving rock. The waters of that spring, even in that early time, were famous throughout Hardin County, in which it was located, as now it is famous throughout central Kentucky. Near this picturesque natural spring this strong young Virginian, a carpenter by trade, built a log cabin to which, on the following 10th of June, he brought his bride, Nancy Hanks; and in that little cabin, three years later, the Lincoln family gave welcome to the child whose name was to belong to the ages. On this farm the boy Abraham used to play with his sister and the boys of his neighborhood. In this little cabin Lincoln received his first schooling in the primary three R's from his mother, who taught him what she could in the long evenings by the light from spice-wood twigs hacked together upon a log.

It was during the nine years spent upon this farm that Lincoln enjoyed all the real boyhood he ever had. Though the life there, as in Indiana and Illinois, as he later said, was described by the single sentence in Gray's Elegy, "The short and simple annals of the poor," his real play-time was on the rock spring farm. Here he was a natural boy, hunting coons and partridges, victimizing his playfellows with practical jokes, always accompanying his father with grist to the mill, for the sake of an outing, and for the same reason he pursued the stone-wagons and the help which his father used to general into service along the old picturesque Louisville and Nashville pike, of which the good father was the county supervisor.—From "A Park of Patriotism: The Lincoln Farm," in the *American Monthly Review of Reviews* for March.

Abstracts of the Leading Articles of the Month.

The Value of Dermographism in the Diagnosis of Functional Neuroses

Stursbergs (Deutsches Arch. fur klin. Med.) conclusions are based upon the results of a careful examination of 244 individuals (90 men, 84 women, 70 children), and may be summarized as follows: Reddening of the skin after mechanical irritation of a moderate character was observed in the vast majority. Complete absence of this reactionary reddening is a great exception, and is probably due to an abnormal condition of the skin. Slightly higher values for the degree of dermographism in the various neuroses were obtained by comparison of the average figures taken from a longer series of examinations. The phenomenon hardly possesses diagnostive value, however, since it may exist in the same manner in the absence of all nervous disturbances.

A Note on the Condition of the Tendo Achillis Jerk in Diphtheria.

Rolleston presents the results of his observations in 100 cases of diphtheria in which the tendo Achillis was investigated until the time that the patient was allowed to sit up. This period varied in length according to the severity of the case, the condition of the heart and the presence or absence of any paralysis from twenty to sixty-three days from the onset of the disease. The reflex was sought for in the recumbent position. In forty-seven cases the Achillis jerks were affected to a varying degree; they were completely lost in twenty cases, and rendered sluggish in twenty-seven. In the remaining fifty-three cases they remained active throughout the period of observation, which in no case was less than six weeks, and in several cases was prolonged to three months or more. His conclusions are: (1) The tendo Achillis jerks are affected in a considerable proportion of all cases of diphtheria, though less frequently than the knee jerks. (2) The frequency and extent to which they are affected bear, like albuminuria and paralysis, a direct relation to the character of the initial faucial attack. (3) They are completely abolished in all cases of diphtheritic paraplegia. (4) Their absence may be the only evidence of loss of motor power in the lower limbs. (5) Like the knee-jerks, they are liable to be affected at an early stage of the disease, and to remain absent after disappearance of all diphtheria paralysis, properly so called. (6) Like the knee-jerks, again, they may be unequally affected on the two sides; and, like the former, they may be unusually brisk before they become sluggish and finally disappear. (7) The Achillis jerk, like the knee-jerk, after it has been lost may reappear on one side before it does on the other.

Removal of Tumor of Suprarenal Capsule.

Heidemann (British Medical Journal) reports the removal of a tuberculous tumor of the suprarenal capsule of the size of a child's head. About twenty-four cases were collected by Wendell and published in 1904, but it was not always clear how far they were malignant or innocent. Heidemann's patient was a lady aged fifty-two, who had suffered from a steadily increasing debility, emaciation and nervous depression. She had previously been very robust. A tumor in the right loin was visible on inspection; it was freely movable forward. The urine was albuminous, and the albumin, it was reported, proceeded from both kidneys. Abdominal nephrectomy was performed, the operator preferring it to a lumbar operation when a renal or suprarenal tumor has to be removed. It was not possible to save the right kidney. The tumor was reported to be a typical adrenal "struma." The patient recovered and steadily improved in general health until she regained her former strength. He lays stress on the absence of any kind of discoloration of the skin and of any hemorrhagic tendency, whether before, during, or after the operation, yet the tumor was of the type seen in Addison's disease, and when it was removed the constitutional symptoms disappeared. The albuminuria also passed away, but in a discussion on this case some doubt was expressed as to whether the left kidney was the seat of nephritis or any other disease which is associated with albuminuria.

Parasitic Character of Carcinoma.

Butlin (British Medical Journal) says that carcinoma is a parasitic disease, not in the limited sense as synonymous with infective, but in the larger and wider sense to express the fact of one organism living at the expense of another organism. Certain important modification have taken place in our views of carcinoma. 1. It is improbable that carcinoma cells are derived from the cells of the part in which it first appears —i. e., there is no ground for the theory that carcinoma is derived from the extension downwards of the normal process of the epidermis. 2. The growth of carcinoma depends on the growth and reproduction of its own proper cells, and does not depend on transformation of the neighboring cells into carcinoma cells. 3. The stroma or framework of carcinoma is derived from the connective tissue of the part in which the carcinoma grows. On the

above and other grounds the author maintains that the carcinoma cell is an independent organism, like many a protozoon. The anatomy of the cell is that of the simplest forms of animal life. Of its physiology little is known. Reproduction takes place by mitosis and by amitosis, and the conjugation of nuclei has been observed in carcinoma of the highest as well as of the lowest animals. Cancer cells exhibit a singular tendency of life. They do not produce any specific poison which is hurtful to the tissues of the host, but they are liable to the attacks of pathogenic organisms. To explain the localization of cancer we may assume that there are tissues and organs of the host which are not suited to the support of the cancer cell, and which never can be rendered suitable; also that other tissues and organs are suitable only at certain times and under certain conditions.

Chronic Incarceration of the Stomach in a Congenital Diaphragmatic Hernia.

Heidenhaim (Deutsche Zeit. f. Chir.) describes a patient, a boy, aged 9 years, who had had bronchopneumonia twice, and a year previous to the present condition had bronchopneumonia with empyema. A month later resection of the 7th left rib and a quart of pus removed, in which were large shredded pieces resembling pieces of omentum coming from the median line near the diaphragm. Recovery was good except for pain in the left shoulder, and the child gained in weight and strength and attended school, but four months after he began vomiting at intervals, and finally every day toward evening, when the pain in the left shoulder would become very severe. The patient is emaciated, pulse slow and irregular. Precordial tympany, instead of dullness on percussion. Clear vesicular breathing on auscultation. Stomach lavage relieved the pain but not the vomiting. The patient complained of great thirst. X-Ray examinations were made: 1, of the empty stomach; 2, filled with two liters of fluid; 3, with a stomach-sound inserted; 4, after taking an emulsion of bismuth. Diagnosis: Stenosis of pylorus caused by kinking of pylorus, due to hernia in the diaphragm. Three months later operation was performed. On opening the abdomen in the middle line the transverse colon was found under the diaphragm; it was pulled down and then it could be seen that the stomach had disappeared in a cleft of the diaphragm, just in front of the spinal column, only a part of the pyloric end pressing. The stomach was readily drawn out of the mediastinum after separating several adhesions when the following conditions were noted: There was only a gastrocolic ligament of the right side, and on the left side of the transverse colon was no omentum, and only poorly developed on the right side. The omentum seemed to have developed on the stomach, beginning at the middle and extending to the left and adherent at the margins of the cleft. A semivolvulus had taken place on account of the rotation that evidently must have occurred when the stomach entered the cleft, the greater curvature going in first. The stomach was sutured to the transverse colon, and then after thorough examination of the cleft in the diaphragm it was approximated and sutured without tension. The cleft was anterior to the cardia, extending from behind and over the liver, the width of two fingers to the right of the cardia, and extending then the left post axillary line. The patient made a rapid recovery and at the end of three weeks was sent home well.

This is, we believe, the first case on record of a cure of congenital hernia of the diaphragm.

The Blood in Tuberculosis, Etc.

Erben (British Medical Journal) has estimated the various constituents of the blood in tuberculosis and some other diseases. In tuberculosis the hemoglobin, serum, albumin, and globulin are slightly diminished. Neutral fat and cholesterine are also decreased. Calcium, however, shows an increased percentage. This latter fact is of great interest from the standpoint of the previously ascertained excretion of calcium in tuberculosis. The toxins of the tubercle bacilli appear to first prejudice the formation of the albumins and later to act upon the erythrocytes. The plasma is at first almost normal, but oligoplasma and hydremia may follow later. Anemia sometimes occurs in the early stages and arises from a decreased activity of the bone-marrow. In carcinoma of the stomach the plasma, chlorides, and calcium are all increased, the ash, albumins, hemoglobin, iron, and erythrocytes being decreased. In diabetes the blood shows an increase in the extractives and in calcium, the potassium being decreased.

Treatment of Uncinariasis.

Phillips (Journal of Tropical Medicine) call attention to the fact that not infrequently treatment with thymol is either unsuccessful, takes an unduly long time, or is attended by the appearance of undesirable symptoms due to the toxicity of this drug. The author has tried in a series of over 100 cases eucalyptus oil as a vermifuge, making use of one or the other of the following mixtures:

R. X.	Olei Eucalypti,	gm	2.0-2.50
	Chloroformi,	gm	3.0-3.50
	Olei Ricini,	gm	40.0-40.0

The patient receives at 6 p. m. a saline purge; fasts during the night, and at 7 a.m. and and 7:30 a. m. receives half of above mixture. He is kept in bed until bowels have moved. With children or weak patients the weaker mixture is used and may be given in three doses at 20 minutes intervals. With adults in fairly good condition the stronger mixture is used. This treatment can be repeated each second day until negative results indicate either complete failure or success of treatment.

In a series of over 100 cases there were four complete failures. In a number of cases the patients left the hospital before it could be said positively that the treatment had succeeded in removing all of the hookworms. Phillips at no time or in no case observes any alarming symptoms due to the absorption of the drugs given. He claims for the treatment as its chief advantage, efficacy equal to or superior to the treatment with thymol; that it is cheap; that it can be repeated frequently and that in his experience it has no bad effects.

In view of the frequency of cases of hookworms in this section of the country, and of the fact that it is well known that thymol from time to time has produced serious results, it seems worth while to call attention to this method of treatment as an alternative of the more usually employed one.

The Surgery of the Thoracic Portion of the Oesophagus.

Sauerbruch (Beit z. klin. Chir.) after an extensive and detailed history of all previously reported surgical work on the œsophagus, he describes the topography of the œsophagus in the dog and in the man, illustrating the description with excellent plates. The author then describes the technique of approach to the thoracic œsophagus (it will be remembered that Sauerbruch has developed the negative pressure chamber for use in performing intrathoracic operations). Oesophagotomy, œsophagogastrostomy, and œsophagectomy are described next in order, the paper ending with a description of three cases in which the œsophagus was resected and anastomosed with the stomach, in human subjects.

Beer-Drinkers' Heart.

Keferstein (Zeit. fur Diat. und. Phys. Therap.) discusses the effect upon the heart of drinking large quantities of fluids and especially deals with the question of how far the so-called "beer-drinkers' heart" is caused by the alcohol in the beer and how far it is a mere mechanical effect of the quantity of fluid taken in. His view that the toxic effect of the alcohol is the main cause, to which other causes are only secondary, has been combated by Hueppe, who cites the occurrence of an exactly similar heart condition in excessive tea drinkers in Russia in support of the theory that the amount of fluid rather than the nature of the fluid is the harmful factor. Tea, however, may itself exert a toxic influence, and in favor of Keferstein's view is an observation of Aufrecht, who found that spirit drinkers also suffered from similar heart lesions. Certain authors have held that a plethora vera or increase in the total amount of blood in the body without change in its composition may result in part from drinking large quantities of fluid, and that such a plethora must throw more work upon the heart. Keferstein does not admit that the existence of plethora vera has been demonstrated, for we have no direct method of estimating the total quantity of blood in the body. Of the writers who describe the condition most appear to consider it the result of over-feeding, in addition to overdrinking. When appearing in combination with over-feeding, if we suppose that the need of the body for nutrition is increased and that all metabolic processes are more active than normal, the work of the heart will undoubtedly be increased, but not now by any mere mechanical process. Apart from such a supposition, it seems impossible that plethora vera can mechanically increase the work of the heart. The need of the tissues for nutrition being unaltered, the flow of blood through the capillaries will not be increased, and the only effect of the condition will be an accumulation of blood in the most distensible part of the vascular system, that is, in the veins. The condition of plethora serosa or of increase in the fluid constituents of the blood is radically different. Since the number of cells in any given mass of blood is diminished, a greater mass of blood than before must pass through the capillaries in a given time in order to sustain the nutrition of the tissues, and if other conditions are supposed constant, the heart must work harder to bring this about. On the other hand, the viscosity and adhesion of the blood being diminished, the friction with the vessel wall will be diminished and the work of the heart to this extent lessened. Both these factors act together and we have no method of estimating the total result on the work done by the heart. Experiments on animals have shown that water injected into the veins is rapidly excreted in the urine. Forbes has carried out an experiment to determine how far a corresponding process takes place in man. He drank on successive days large and increasing amounts of water, and found that the urine passed in the six hours following increased with the increase in the amount of water drank, but not in as rapid

a proportion. When before 6 o'clock in the morning he drank 600 c. cm. of water, 513 c. cm. of urine were excreted before twelve o'clock; when 1,500 c. cm. were drunk 1. 186 c. cm. were excreted. There can be no doubt that the watery contents of the blood must be temporarily increased between ingestion and excretion, and the work of the heart may be in this way temporarily increased, but it seems improbable that such an increase can overstrain a normal heart, when it is remembered that the heart is constructed to bear continually-recurring changes in the amount of work thrown upon it. Observations made in cases of diabetes insipidus seem to bear out the view that drinking large quantities of fluid has little, if any, effect on the healthy heart. The conclusions at which the author arrives are: (1) The results of experimental and clinical work go to prove that changes in the heart, such as are found in the so-called "beer heart" cannot be brought about only through the excessive intake of fluids; and (2) neither the heart changes which are recognizably due to alcohol, nor those which some authors regard as due to the intake of an excess of fluids, can be constructed and explained mechanically from a consideration of their causes.

Ulcer of the Stomach and Pregnancy.

Le Play (Annal. de Gynecol. et d'Obstet.) describes the case of a woman twenty-seven years old, six months pregnant, who had vomited almost continuously for over three months. Her stomach was dilated and very tender. Later she passed large quantities of blood from the bowels and had several attacks of hematemesis in rapid succession. She rapidly became very weak and died after presenting a clinical picture resembling progressive pernicious anemia. At autopsy the larger curvature of the stomach showed an ulcer 12 cm. x 9 cm., with raised margins. The base extended to the peritoneum, but there was no perforation. There was marked sclerosis of all the adjacent vessels. Owing to this condition of the blood vessels, the nutrition of adjacent areas suffered and had undergone degeneration, offering but feeble resistance to the action of the acids of the gastric secretion. He considers that pregnancy by favoring sclerotic changes in the blood vessels would thus predispose to the formation of a gastric ulcer.

Acute Pancreatitis.

Thayer (Johns Hopkins Bull.) reports five most interesting cases of acute pancreatitis, in all of which where operation took place, and in all of which the diagnosis was established, from the clinical course of the disease, and from the physical examination.

He mentions the experimental work that has been done by Koerte, Flexner, Opie, and others, and mentions the important observations of Opie and Halstead on the retrojection of bile as a causative factor in pancreatitis complicating gall-stones. Lately there has been noted the fact that a large number of cases of acute pancreatitis occur during pregnancy and the puerperium. He says that glycosuria is of little diagnostic assistance in pancreatitis. The examination of the feces often leads to more definite aid, but to do this work thoroughly, the patient must be most carefully fed, and this is not possible with patients that are as ill as patients of this class usually are. Opie and Hewlett have both demonstrated the importance of lipase in the urine.

Ventral Fixation of the Uterus by a New Method.

Richardson (The London Medical Lancet) has operated in 12 cases for the relief of patients suffering from severe forms of prolapse of the uterus, with cystocele and rectocele, with or without rupture of the perineum. The writer says that general laxity of all the pelvic and perineal connective tissues is the chief cause of prolapse of the uterus. By his method of operating, perineorrhaphy and colporrhaphy can be dispensed with. The uterus is left securely suspended from the anterior abdominal wall "with certainty that it will not again become prolapsed."

Richardson says that in many cases after ventro-fixation adhesions completely disappear and the uterus lies free. In other cases long thin bands remain. His method, he claims, is free from the immediate danger of hemorrhage and the remote danger of intra-abdominal bands. The method is as follows:

1. Open the abdomen in the middle line from the pubes to the umbilicus.

2. Retract the left side of the wound and take hold of the left round ligament of the uterus, then draw on it until it is tense between the point held and the inguinal canal. Catch it with two clip forceps as near to the inguinal attachment as can conveniently be done and divide it between the clips. Ligature the distal end and remove that clip, dropping the stump. Retain the clip on the proximal divided end.

3. Repeat this on the right side.

4. By means of the two clips upon the proximal divided ends of the round ligaments draw the uterus up towards the abdominal wound. Some tension will thus be made on the peritoneal attachments of the round ligaments, and, as a rule, the

peritoneum will stretch sufficiently to allow the uterus to come up into the wound, even, in some cases, as high up as the umbilicus, but it may be necessary to make a few cuts with the scissors in the edges of the peritoneal attachments, in which case care must be taken not to cut right up into what may be called the axillae of the round ligaments lest any vessels be injured. They are troublesome when cut. Lift the uterus by its round ligaments as high up in the abdomen as it will reach without undue tension and with the eye mark the position. In some cases the uterus was purposely left outside the vulva before the abdomen was opened and it came up without any difficulty when drawn upon by the round ligaments.

5. At the place to which the fundus of the uterus reaches catch hold of the skin and superficial fascia on the left side of the wound and draw on them, at the same time separating them from the abdominal aponeurosis by thrusting in the handle of a scalpel as far as the outer edge of the rectus abdominis muscle. Withdraw the handle of the scalpel and pass a pair of clip forceps into the track thus made as far as a point one and a half inches from the middle-line incision and then thrust the clip forceps through the aponeurosis, the rectus muscle, and the peritoneum into the peritoneal cavity; with the clip catch hold of the end of the left round ligament and draw it through the abdominal wall, keeping the clip attached.

6. Repeat this on the right side and then by dragging upon both round ligaments the anterior surface of the uterus will be seen to come up and to lie against the anterior abdominal wall.

7. Whilst an assistant keeps up traction upon both round ligaments and so retains the uterus in its new position, sew up all the abdominal wound, except the superficial fascia and the skin, in layers with catgut. Let one or two of the sutures of the peritoneal layer be passed through the peritoneal coat of the uterus and thus occlude the passage between the abdominal wall and the uterus, through which it is conceivable that a loop of small intestine might find its way and so become obstructed if the passage were not closed.

8. Lay the left round ligament at right angles over the front of the aponeurosis and across the middle line as far as the point at which the right round ligament emerges. Ligature the left round ligament at that point and use the ends of the ligature to sew the ligament to the aponeurosis there. Cut off any redundant ligament.

9. Do the same with the right round ligament and the two ligaments will then lie side by side across the front of the aponeurosis. Additional security is made if a few sutures attach the edges of the round ligaments to one another and also to aponeurosis, but care must be taken to see that too much of each ligament is not included in each suture lest the blood supply beyond be diminished.

10. Suture the skin and the operation will be completed.

Is Menstruation Physiological or Pathological?

Tobler (British Medical Journal) has during the past two years examined women, with a view to ascertain as precisely as possible the influence of the catamenia on the female economy. As is the case with most previous observers, Tobler finds that in the great majority of women at the present day menstruation is associated with distinct deterioration of the general health and diminution of functional energy. In 26 per cent. local pain, general malaise, and psychoses coexist; in larger proportions come those in whom general weak health, or else some psychosis or local pain, is alone experienced at the period. In 16 per cent. none of these symptoms are present, and Tobler makes a separate group of 3.3 per cent. in whom the mind and functions are stronger during the period. In about 3 6 per cent., constituting yet another class, this increase of strength during the presence of the catamenia is associated with distinct disturbances in the intervals. He considers that the familiar disturbances during menstruation are pathological, but that the process itself is physiological. Deterioration of constitution and unhealthy habits and surroundings cause the increase of tissue change, which is part of the process, to result in toxic products prejudicial to the system, whilst normally products favorable to the economy should be evolved.

The Pathological Conditions Found in the Case of an Individual who had Suffered from Deafness During Life.

Gray (British Medical Journal) mentions the case of an individual from whom the temporal bones were removed post mortem had suffered from almost absolute deafness and very severe tinnitus for a period of 17 years before her death, at the age of 71.

The patient died from malignant disease of the uterus, and in addition to the conditions relative to the cancerous affection the following were noted in regard to the anatomical changes found in the temporal bone and the adjacent structures.

The bones of the skull were remarkably soft, and the saw went through the calvarium almost as if the bones were of the consistency of hard cheese. The greater part of the temporal bone was almost soft in

character, and the dense, ivory-like capsule of the labyrinth was much reduced in thickness. The mucous membrane of the tympanum and Eustachian tube was normal throughout. The malleo-incudal joint was ankylosed on the right side but not on the left. On both sides the stapes was completely ankylosed in the oval window, the ankylosis being bony throughout.

In the left membraneous labyrinth the changes in the bony capsule were found to have produced distortions in the two limbs of the posterior canal by encroaching on its lumen. The cochlear branch of the auditory nerve was atrophied at least in the two upper turns of the cochlea. The ligamentum spirale appeared to be of a less dense nature than normal, though this may have been due to old age and not to the disease.

In the right membraneous labyrinth there was found to be no actual distortion. The ligamentum spirale was atrophied, as was also the cochlear branch of the nerve. There were two masses of calcareous deposits, one in the common limb of the posterior and superior canals and the other in the posterior limb of the horizontal canal.

INDICATIONS FOR THE EXTIRPATION OF THE ADEXA IN CONNECTION WITH HYSTERECTOMY.

Miranda (Arch. di Ostet. e Gyn.), after a comprehensive clinical and anatomo-pathological study of the functions of the ovaries and their relation to the menopause, gives the following conclusions as to the advisability of their preservation or removal in cases of hysterectomy. The studies of the functions and secretions of the ovary do not yet render it possible to formulate the effects of their removal on the organic processes of the body. Clinical observation shows that preserving the ovaries lessens the rapidity and the severity of the occurrence of symptoms due to the menopause, thus rendering the organism able to accustom itself gradually to the absence of their function; the atrophy of the ovaries is slow and gradual. Experimental and anatomo-pathological examinations support this view of their preservation. There are certain dangers and inconveniences due to their preservation which counterbalance the advantages of the method. The ovaries should never be left in hysterectomy for disease of the adnexa themselves, nor in disease of the uterus of maligant character, nor in 60 per cent. of myomata. Their preservation is especially to be recommended when the operation is done for the accidents of labor, excepting contracted pelvis and disease of the sexual sphere, in conjunction with a resection of the body of the uterus.

CONTRIBUTION TO THE THERAPEUTICS OF RETROVERTED PREGNANT UTERUS.

Giovanni Rizzatti (Ann. di Ostet. e Gin.), describes the methods for replacement of the retroverted gravid uterus made use of by Fabri in the University clinic at Modena. The obstacle to reduction that presents itself on account of negative pressure is obviated by the introduction of air into the rectum by means of a catheter, or by insufflation of air mechanically. The patient is placed in the knee-elbow position while the replacement is going on, and the weight of the uterus tends to drag it into place, while the reduction is completed by bimanual manipulations. In severe cases it is necessary to use a manual replacement with pressure on the organ itself. The uterus is a spheroid at this period of pregnancy, with a transverse axis, and it is necessary to revolve it upon this axis; by moderate pressure on the fundus in a direction parallel to the sacral curve, while the neck is drawn upon by the fingers of the other hand or by forceps, the uterus is made to revolve on this axis. He says that this method of replacement has been successful at the clinic in Modena, and recites the history of several cases in which a normal pregnancy went three and a half months it is best to insert a pessary to prevent recurrence of the displacement.

EXTENSIVE RESECTION OF THE WALL OF THE BLADDER FOR CARCINOMA, WITH FAVORABLE RESULTS.

Derjushinsky (St. Petersburg Medicinische Wochenschrift), reports the case of a woman 62 years of age, who complained of pains in the bladder and hematuria. The cystoscope revealed a tumor on the anterior wall of the bladder. On May 24, 1902, Sectio Alta. After opening the bladder, the neck of the bladder and ureteral openings were found to be free, as the tumor was confined to the anterior and lateral walls of the bladder. Therefore, resection was made involving two-thirds of the bladder. The bladder sutured, tamponade, of the perivesical connective tissue. Catheter a demeure. After removal of the catheter, there was a fistula over the symphysis. The patient had strangury every twenty minutes. In September, 1902, the fistula was unaltered and incrustations could be demonstrated in the bladder. On the 3rd of October the bladder was opened again, and an incrusted silk thread removed. In the wall of the bladder no recurrence apparent. Fistula closed, but in the middle of November serum began to ooze. Hematuria began, and there were pains over the symphsis and thighs. In December an exacerbation was proved. Exitus January, 1903. Autopsy: Exacerbation in bladder; multiple metastases in the peritoneum; left sided hydronephrosis by closure of the ureter by the carcinomatous growth.

RARE ULCERS OF THE VAGINA.

Vautrin (Ann. de Gyn. et d'Obstet.), describes a rare form of round ulcer of the vagina, superficial, involving only the mucosa, not indurated or undermined, not high-

colored or surrounded by an areola, with no inflammation of surrounding parts; it has a red base, covered with thick, odorless pus. It is always located in the posterior vaginal cul-de-sac. It appears unnoticed by the patient, who complains of little pain, simply of the secretion. It may occur in persons of advanced age, affected by arterio-sclerosis, when it is supposed to be due to the changes in the circulation. Here it is generally found by autopsy. It may also occur in young persons who are debilitated. It can hardly be of bacterial origin. The author thinks it can hardly be due to irritation of confined secretions in the vagina. In young persons it is probably due to vaso-motor disturbances, the result of a hysterical or nervous condition of the patient. There is a lack of nutrition in some spot, a detachment of the epithelium, and the appearance of an ulcer, which does not tend to heal except under local stimulation, combined with antiseptic douches. It must be distinguished from tuberculosis, syphilis and gonorrhea, where a bacteriological examination is useful. Another ulcer observed by the author began as a gangrenous spot, which extended and healed at opposite borders, until it had involved a great part of the vagina, and had hidden the cervix entirely in its cicatricial masses.

TUBERCULOSIS OF THE FEMALE GENITAL ORGANS.

Nebesky (Monatsschr. fur Geb. u. Gyn.), states that tuberculosis of the genital organs among women is much more frequent than has been genrally supposed, and in the country and in small cities is the cause of the larger number of inflammatory lesions of these organs. There are several views as to the cause of the affection. Some regard it as always secondary, while others contend that the infection is primarily one of the genitals themselves. The tubes are most often the seat of the infection. The subjective symptoms of most importance are amenorrhea, sterility and leucorrhea. The prognosis depends on the involvement of other organs, early diagnosis and treatment, and the position of the patient and her ability to obtain the best conditions for recovery. When the tuberculosis has involved the peritoneum primarily the operation is more difficult and mortality larger. Some believe that only the expectant treatment, with feeding, change of climate and hydrotherapeutic treatment should be used. Others advise immediate radical operation, removing all the diseased organs whenever the lesions are localized. He describes a case operated on by him in this way, in which the uterus and tubes were alone affected, and eighteen months after the operation the patient still remained well.

THE TREATMENT OF SYPHILIS.

Jonathan Hutchinson, in the London Practitioner, gives a brief outline of the treatment given his luetic patients during the first year of the disease. Medication should never be begun until the character of the initial sore has been definitely determined. A pill containing 1 grain each of gray powder and Dovers powder is then prescribed to be taken three times a day after eating and if within a few days no diarrhea ensues the dose is increased to four, five or six pills at separate intervals during the day. In debiltated subjects 1 grain of quinine is added to each pill. All fruits, green vegetables and soups are interdicted and an alum mouth wash to guard against ptyalism. While the patient is allowed to continue his employment a large amount of rest in bed is advised and no intermission during the treatment during the first year is permitted. As a rule, Hutchinson states that the iodids are to be avoided during the early stages of syphilis, but when extensive ulceration is present, iodid of potassium may be given in solution in conjunction with the pill of gray powders which causes a better effect than is obtainable from the single administration of iodid of mercury. It is stated, however, that under a faithful performance of the treatment orignally laid down manifestations of the disease in the throat or on the skin are extremely rare.

ENTEROPTOSIS.

Mathes (Arch. f. Gyn.), after a careful study of the cases of enteroptosis appearing at the gynecological clinic at Gratz, sums up the results of his observations thus: Enteroptosis is a constitutional and hereditary anomaly of the abdominal organs, consisting of a weakness and absence of vital energy in the whole body. The changes in the position of the abdominal organs are due to the insufficiency of the hypoplastic, sunken thorax, and secondarily to the weakness of the abdominal walls. The abdominal organs are supported entirely by their ligaments and the abdominal walls, while in a normal thorax the suction power of respiration is a great factor in their retention in place. The position of the body and the expression of the face betray the abnormal condition. The dorsal vertebrae bend forward, the normal lordosis of the lumbar region is absent, and the abdomen with its long axis continuous with the long axis of the thorax forms an open funnel. The pelvis is only slightly inclined, and the the face has a juvenile character. The enteroptotic habit is identical with the phthisical habit. The symptoms depend on the degree of anomaly. The more severe this is the sooner will symptoms appear. Chlorosis in such girls is a result of enteroptosis. Other contributing factors in these cases are wasting diseases, pregnancy, labor and the puerperal state, tight lacing metal and bodily overwork, poor nourishment and bad conditions of living, acute and chronic psychical injuries, lesions of the genital organs, and especially gynecological diseases. The symptom complex of retroversion, prolapsed kidneys, and en-

teroptosis is the same. The peritoneum of such women is very vulnerable, and pain is increased by genital troubles. Enteroptosis is a modern disease. The treatmnet should be by all sorts of strengthening measures; gymnastics suitable to strengthen and enlarge the thorax, and reinforce the abdominal muscular power; in severe cases rest in bed and overfeeding. Many cases are benefitd by a well-fitting abdominal support. The local treatment of gynecological troubles is of least importance; prophylactic measures in the young are of the greatest.

MEDICAL EXAMINING BOARD OF VA.

The Medical Examining Board of Virginia, met at Murphy's Hotel, Riemond, Va., 9 P. M. Dec. 12, 1905. Dr. R. W. Martin, Lynchburg, President, presiding; Dr. R. S. Martin, Stuart, Secretary-Treasurer, recorded.

On roll call, the following other members were present: Drs. R. M. Slaughter, Theological Seminary; E. T. Brady, Abington; A. S. Priddy, Bristol; H. M. Nash, Norfolk; J. E. Warriner, Richmond, R. F. D. No. 7; W. B. Robinson, Tappahannock; Robert Randolph, Norfolk; E. C. Williams, Hot Springs; C. W. Rodgers, Staunton.

Minutes read and approved.

Questions on Practice, Materia Medica and Therapeutics, Surgery, Histology, Pathology and Bacteriology, Obstetrics and Gynecology Anatomy and Chemistry read and adopted.

The order of examinations agreed upon was as follows:

Wednesday—Practice, Obstetrics and Gynecology and Surgery.

Thursdady—Histology, Pathology, Bacteriology, Chemistry and Physiology.

Friday—Anatomy, Hygiene and Medical Jurisprudence, Materia Medica and Therapeutices.

The President appointed Drs. Robt. Randolph, W. B. Robinson, C. W. Rodgers and R. R. Allen, Committee on Oral Examinations.

The Committee appointed at last meeting of the Board to change the sections and number of questions reported as follows:

We, your committee, beg to report as follows:

In future there shall be nine sections divided as follows:

1st. Anatomy and Embryology.... 10
2nd. Chemistry 6, Toxicology 2, Medical Jurisprudence 3.... 11
3rd. Histology 2, Physiology [illegible], Hygeiene 3. 11
4th. Materia Medica 6, Theraputics 6.. .. 12
5th. Pathology 6, Bacteriology 3, Neurology 3.... 12
6th. Laryngology, Rhinology, Ophthalmology and Otology.... 10
7th. Practice of Medicine, Diagnosis and Etiology.... 12
8th. Obstetrics 5, Gynecology 5 and Pediatrics 2.... 12
9th. Surgery.... 10

Alphabetically arranged list of applicants for license to practice Medicine, Surgery, etc., who passed satisfactory examinations before the Medical Examining Board of Virginia during its Fall Session December 12-15, 1905, held at Richmond, Va.

Anderson, V. V., Lynchburg, Hosp. Coll. of Med., Louisville, 1903.

Butzner, John D., Fredericksburg, Va., Univ. of Va., 1904.

Blackwell, H. B., Norfolk, Va., Univ. of Va., 1901.

Black, Root A., Brooklyn, N. Y., Coll. Phys. Surgs., N. Y., 1883.

Boice, R. H., Low Moor, Va., Pulte Med. Coll., 1905.

Byrd, J. H., Richmond, Va., Leonard Med. Coll., 1904.

Crompton, Robt. F., Charlottesville, Va., Univ. of Va., 1900.

Clarke, Wm. F., Petersburg, Va., Leonard Med. Coll., 1905.

Casey, Elsie May, Lynchburg, Va., Woman's Med. Col., Balto., 1905.

Cooke, T. S. Portsmouth, Va., Univ. of Va., 1905.

Cowie, C. S., Culpeper, Va., Columbian Univ., 1891.

Derby, A. P., Gordonsville, Va., Univ. of Va., 1904.

Dameron, B. W., Warfield, Va., Med. Coll. of Va., 1905.

Dow, Lyman, Ware Neck, Va., Med. Coll. of Ohio, 1867.

Easley, H. O., South Boston, Va., Univ. of Va., 1904.

Edwards, Geo. Martin, Philadelphia, Pa., Univ. of Pa., 1903.

Fitzgerald, R. S., Spruce, W. Va., Univ. Coll. Med., 1905.

Fletcher, C. C., Langdon, D. C., Natl. Univ. of Washington, 1903.

Fisher, C. E., Little Orleans, Md., Detroit Homeopathic Med. Coll.

Goldbach, L. J., Norfolk, Va., Univ. of Md., 1905.

Grant, H. C., Univ. of Va., Round Hill, Va., 1904.

Gray, A. R., Atlee, Va., Med. Coll. of Va., 1905.

Hammond, S. W., Amsterdam, Va., Univ. of Md., 1905.

Hall, A. J., Rossyln, Va., Geo. Washington Univ., 1886.

Hare, J. H., Newland, Va., Maryland Med. Coll., 1905.

Hays, B. K., Oxford, N. C., Univ. Coll. of Med., 1894.

Jones, G. I., Washington, D. C., Geo. Washington Univ., 1905.

Lankford, H. M., Princess Anne, Md., Johns Hopkins Univ., 1905.

La Roque, G. Paul, Richmond, Va.. Univ. of Penna., 1902.

Mayes, D. C., Charlottesville, Va., Univ. Coll. of Med., 1905.

Murray, A. E., Graham, N. C., Med. Coll. of Va., 1905.
Moone, S. I., Onancock, Va., Univ. Coll. of Med., 1905.
Nottingham, C. L., Sea View, Va., Maryland Med. Coll., 1905.
Owens, O. S., Manchester, Va., Univ. of Maryland 1905.
Riley, Philander C., Natural Bridge, Va., Columbian Univ., 1899.
Richardson, J. E., Mt. Valley, Va., Hosp. Coll. of Med., 1905.
Storie, J. G., Hurley, Va., Tennessee Med., 1898.
Wall, Harry, Winchester, Va., Univ. of Va., 1904.
Whitehead, R. H., Charlottesville, Va. ,Univ. of Va., 1887.
Welborune, Wm. C., Glencarlyn, Va., Vanderbilt Univ., 1899.

QUESTIONS FOR EXAMINATION.

Section on Hygiene and Medical Jurisprudence

Dr. A. S. Priddy, Examiner, Bristol, Va.

Hygiene.

1. Give the principle sources of the water supply of large towns and cities; state how pollution of such sources may be caused and the most deleterious substances and germs frequently present.
2. Describe the effects of hot and moist atmosphere on the human system, and state the classes of disease of which it is productive.
3. Give clearly and concisely your understanding of the modern theory of the propagation of yellow fever and of foci and subfoci in connection with epidemic disease.
4. Give names, causes and sanitary remedies for the relief and prevention of the principal diseases incident to school life.

Medical Jurisprudence.

1. In matters of civil rights, what is considered a live birth by our laws, and what manifestations of life would establish it medeo-legally?
2. Give the usual motives which, in a general way, underlie malingering, and state what general observations would assist you in differentitating between the feigned and real condition of a suspect.
3. Give a practical and reliable test for human blood stains, and state the difference in color of the blood of one dying from strangulation from that of one dying from suffocation by illuminating gas, and explain the cause of this difference.
4. Fully describe the symptoms of poisoning by each of the following: Belladonia or active principle, bi-cloride mercury and chronic lead poisoning; and the conditions found in bodies after death from each of these poisons.

Pledge.

Chemistry Examination.

Dr. O. C. Wright, Jarratts, Va., Examiner

Block 1.

(a) What is meant by convection, conduction and radiation?
(b) Define the terms ohm, ampere and volt.
(c) What is the difference between static and dynamical electricity.

Block 2.

(a) Give chemical and physical properties of oxygen.
(b) Place an animal in an atmosphere of pure oxygen, give primary and secondary effects, giving reason for latter.
(c) What are the indications for administering oxygen and how is it given.

Block 3.

(a) Give formula for sulphuric acid.
(b) Give in detail mode of preparation.
(c) What are its chemical and physical properties?

Block 4.

(a) How is phosphorus found in nature?
(b) How is it prepared?
(c) Give symptoms of acute and chronic phosphorus poisoning.

Block 5.

(a) What is the source of organic compounds?
(b) Define a radical.
(c) What are Alcohols?

Block 6.

(a) Define and give general properties of organic acids.
(b) How do protieds occur in nature and give the composition.
(c) What effect does the gastric juice have on proteids?

Block 7.

(a) Give test of blood in urine.
(b) How would you recognize pus in urine.
(c) Having boiled a specimen of urine you get a cloudy precipitate; how would you proceed to determine nature of the precipitate?

Block 8.

(a) What methods are used for obtaining urinary sediments?
(b) What are the most common sediments found in acid urine?
(c) Give chemical test for uric acid in urine.

Answer any six blocks.

Pledge.

Anatomy.

Dr. C. W. Rodgers, Staunton, Va., Examiner.

I. Describe one of the following bony surfaces: Upper extremity of ulna; lower extremity of radius; shaft of femur.
II. Describe the pancreas; giving location, contour structure, nerve and bloody supply.
III. Describe two of the following three muscles, including thir origin, insertion, and action: Gracillis, Lattissimus dorsi, Extensor longus digitorum.
IV. Describe the mammary gland, including the nerve and blood supply.
V. Describe the first portion of the right subclavian artery; giving its relations, and naming its branches.
VI. Give origin, course, distribution, and fun-

ction, of hypoglossal nerve.

Pledge.

Physiology.

Dr. Robt. C. Randolph, Boyce, Va., Examiner.

I. (a) What are Carbohydrates? (b) Name three. (c) Where is Glycogen found, and how found?

II. (a) What are proteids? (b) Name three. (c) Give names of Bile Pigments in man and beast.

III. (a) Name most inmportant ductless glands. (b) What is lymph? (c) What is chyme?

IV. (a) Describe mouth digestion? (b) Describe stomach digestion. (c) Describe intestinal digestion.

V. (a) Give functions of the skin. (b) Give functions of lands of the skin. (c) What is diapedesis?

VI. (a) Give functions of fourth cranial nerve. (b) Give function of eleventh cranial nerve. (c) Give function of cerebellum.

Pledge.

Histology, Pathology and Bacteriology.

Dr. R. M. Slaughter, Theological Seminary, Va., Examiner.

Answer six blocks.

I.—(a) Name the classes into which all tissues are divided. (b) Classify each of the following tissues: Cartilage, muscle, the epidermis, the lining of blood-vessels and tendons. (c) Name the three essential constituents of a cell (but don't give the cell membrane as one of them.)

II.—(a) Name the three groups into which bacteria are morphologically divided. (b) Name and describe the third of these groups, and name the members of it which are pathogenic. (c) Define and illustrate what is mean by mixed infection.

III.—(a) Define hemmorrhage. (b) Define hemorrhage by rhexis, and hemorrhage by diapedesis. (c) Define hematoma. (d) Define hematemesis, hemoptysis, and hematuria.

IV.—Name the mechanical and chemical causes of necrosis.

V.—(a) Which of the connective tissue tumors is malignant? (b) Where does cylindrical-celled carcinoma especially occur? (c) What is the variety of epthelioma that occurs at the junction of skin and mucous membrane? (d) Why is scirrhus carcinoma so called?

VI.—(a) What is meant by regeneration of tissue? (b) Under what condition is it possible? (c) Histologically, what is so-called scar-tissue?

VII.—(a) Is the sp. gr. of the urine high or low in diabetes mellitus, acute parenchymatous nephritis, and chronic interstitial nephritis? (b) What abnormal constituents, both chemical and microscopical, are to be found in the urine in the above named conditions?

Pledge.

Obstetrics and Gynecology.

Dr. H. M. Nash, Norfolk, Va., Examiner.

Obstetrics.

1. Give the differential diagnosis of pregnancy.
2. What are the phenomena of a faulty metabolism, during pregnancy, and what organs are most frequently involved?
3. Why do prophylactic measures play so important a part in bringing about a normal puerperium?
4. Define uterine inertia; from what condition may it arise, and indicate its treatment?
5. Describe the management of labor in transverse and shoulder presentations?

Gynecology.

1. What are the indications for the radical treatment of fibro-myoma?
2. In suitable cases, what are the advantages of myomectomy?
3. Give several methods of treating prolapsus uteri, noting the most preferable.
4. Give the indications for, and dangers that may follow, the use of the Uterine Sound.
5. May leucocytosis be made a diagnostic factor in Gynecological cases?

Answer any four of each block of the above questions.

Pledge.

Meteria Medica and Therapeutics.

Dr. W. B. Robinson, Tappahannock, Va., Examiner.

Materia Medica.

I.—(a) Give the physiological action of the salts of ammonia. (b) State the dose of bismuth subnitrate and its effect along the digestive tract. (c) Mention the symptoms attending chronic chloral poisoning.

II.—(a) Compare the action of morphine with that of codeine. (b) Compare pancreatin with pepsin. (c) Give dose of salol, how frequently repeated, and state in what portion of the alimentary canal is its decomposition effected, and by what means.

III.—(a) State the dose of the extract of colocynth and give its physiological action. (b) Describe the toxtic symptoms which may be produced by the salts of mercury, and give antidotes. (c) Give the dose of eroton oil and state its effects externally applied and internally administered.

IV.—(a) Compared with digitalis, how does strophanthus differ in physiological action? (b) To what alkaloids is the action of veratrum viride due, and what pathological conditions contra-indicate its use? (c) Give the antidote for carbolic acid poisoning.

Sign pledge and number only.

Therapeutics.

Dr. J. E. Warinner, R. F. D. No. 7, Richmond, Va., Examiner.

I.—Define a prescription and name its different parts. (b) What is meant by incompatibility, and give example of two kinds. (c)

Why are antagonistic agents sometimes combined, and give two examples.

II.—(a) Give the therapeutic use of ergot and state its contra-indications. (b) Name the principal nitrates and state briefly their uses. (c) Formulate a compound cathartic pill containing three ingredients acting on different parts of the intestinal tract.

III.—(a) What are direct and indirect antacids? Give examples of each. (b) How is the reaction of the blood and urine affected by the administration of alkalies before and after meals. (c) Give leading indications for use of belladonna and state chief objection to its use.

IV.—(a) Give a leading example of mineral and vegetable astringents. (b) What are chief uses of tincture aconite and give maximum adult dose when using old strength U. S. P. (c) Give chemical antidotes for iodine, corrosive sublimate and opium.

Sign pledge and number only.

Practice of Medicine.

Dr. E. T. Brady, chairman, Abingdon, Va.; Dr. E. C. Williams, Hot Springs, Va., Examiners

1. What conditions are accompanied by severe pain in the chest and what chacteristic symptoms would enable you to differentiate them?
2. What are the early manifestations of tuberculosis and how best managed?
3. What are the clinical symptoms of gastric ulcer and cancer, and how would you distinguish between them?
4. Give etiology and symptoms of: (a) Tonsillitis. (b) Adenoids.
5. In what disorders is the urine increased, and in what decreased? Give a reliable test for each of the following: Albumen, sugar, blood, bile.
6. Give etiology, symptoms and complications of erysipelas. Differentiate it from erythema and acute eczema.

Answer all questions. Sign pledge.

Surgery.

Dr. R. M. Slaughter, Theological Seminary, Va.; Dr. M. R. Allen, Norfolk, Va., Examiners.

1. What are hemrrhoids? Give their cause, classification, diagnosis and radical treatment.
2. What is synovitis? Give its causes, symptoms and treatment.
3. In a case of anuria, how would you determine whether due to suppression or retention of urine and give treatment?
4. Give the causes of non-union in fractures and describe the various methods of treatment?
5. Give the diagnosis and treatment of iritis? (b) Give the diagnosis and prognosis of fractures of the base of the skull.
6. Give the symptoms of hip-joint disease in the early stages. (b) Describe the technique of intravenous injection of salt solution?
7. What is (a) phymosis and (b) paraphymosis? Give treatment of each. (c) Give indications for skin-grafting, and describe a method of grafting.

Pledge.

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In a paper on "Sexual Neurasthenia in Men," Dr. Arthur E. Mink, of St. Louis, Mo., says: "In the treatment of sexual neurasthenia the tonics, such as iron, arsenic, strychnine, quinine, gold and zinc, are of value in many cases. The most efficient in my opinion is Sanmetto. It seems to act directly upon the genito-spinal center and improves its nutrition. Many cases, as I have said before, are remotely due to gonorrhea, and hence Sanmetto is doubly of value in such cases."

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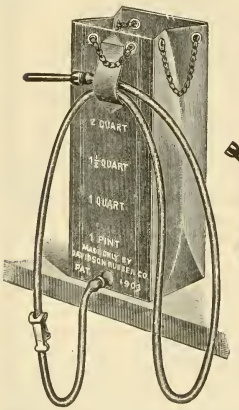

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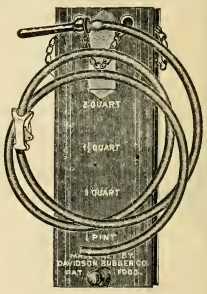

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Psychical Degeneration, and its Relationship to Various Disturbances of Speech.

Olutszewski (Therap. Monatshefte) says that psychical degeneration is a term applicable to patients who are the subjects of faulty inheritance, including various degrees of imperfect psychical development and epilepsy, the greater part of all cases of neurasthenia and hysteria, and also defective mental balance. The sphere of life holds an important place among the causes of degeneration, but it is surpassed by the pathological heredity, which refers not only to imperfect psychical development in the direct ascendancy and in the collaterals of insane or feeble-minded persons, but also to the occurrence of epilepsy, hysteria, neurasthenia, or a lack of balance in the family. A far-reaching etiological factor in various degenerative conditions is represented by constitutional disease, such as syphilis. Moreover, certain accidental causes, affecting the fetus directly, or indirectly through the maternal organism, must receive consideration. The most important manifestations, which all degenerates have in common, are the anatomical, physiological, psychical and social stigmata, different for each category. Disturbances of speech are classed by the author as one of the most valuable signs of degeneration. The outcome of his observations is the conclusion that degeneration is at the bottom of the great majority of all cases of aphasia, stammering, defective enunciation, and nasal speech. Degeneration in the widest sense of the term, beginning with the idiot, and ending with the unbalanced, is the most universal, and at the same time the most important factor affecting all the categories of speech disturbance. Only a relatively small percentage of speech disturbances is due to pathological alterations in the brain tissue of individuals who are not degenerates; such as for instance the aphasia of non-hysterical origin, certain cases of stammering in adults, acquired diseases of the ear, and changes of the naso-pharynx. The majority of patients having speech disturbances must be ranked with the degenerates or the unbalanced, whilst the speech disturbance per se constitutes a cardinal symptom of degeneration.

Arterial Angioma of the Scalp.

Krogius (Centralblatt fur Chirurgie) reports a case of this kind cured by the use of subcutaneous sutures. A curved needle with the eye in the point was passed beneath the mass of vessels and brought out through the skin about an inch away, threaded with one end of a heavy silk suture, and withdrawn. It was then reinserted in the same spot, passed between the skin and the angioma, and brought out at the same opening as before, threaded with the other end of the suture, and withdrawn. A second suture was passed in the same way, the last hole of the first suture serving as the first opening of the second suture, this being continued around the entire proximal edge of the growth; all the ligatures were tied tightly. The angioma almost disappeared after the first operation, leaving only a small mass at its distal part, which was treated in the same manner with complete success.

Intestinal Disturbances in Infants.

Salge (Berliner Klinische Wochenschufe) in discussing the intestinal disturbances of infants, divides them into those which may be due to the diet as such, and those which arise as a result of bacterial action.

Dyspepsia is produced by the ingestion of more food than the digestive processes can take care of, either too large feedings being given, or the interval between is far too short. Owing to this disproportion between the amount of food ingested, and the digestive powers, chemical changes take place in the contents of the alimentary canal which becomes pathological and irritates the mucous membrane, producing vomiting and diarrhea.

Besides the obvious prophylaxis of care in apportioning the food, the author advises for treatment of this dyspepsia, starvation for twenty-four hours on a weak infusion of Russian tea, sweetened with saccharin instead of sugar. If the symptoms do not yield to this treatment, calomel may be given in doses of $\frac{1}{8}$ to $\frac{3}{4}$ gr. at intervals of two hours for three times. Milk diet should not be resumed at once when the stomach and intestines are emptied but some starchy diet substituted. The author recommends Soxlet's nutrient sugar, a soluble preparation of malt and dextrin, to be used in 5 per cent. solution for very young infants. For older babies pure oatmeal or cornflour may be used. Within three days the stools should be semi-solid and of a dark brown color, when the milk may be cautiously resumed. If the vomiting and anorexia continue, the motor functions of the stomach should be investigated. The child should be given a meal adjusted to its weight and age, and the evacuation examined for undigested food and free hydrochloric acid. If the stomach is not empty and contains no free hydrochloric acid it should be washed out with a 1 per cent. solution of Carlsbad salts. In obstinate cases pepsin and HCl may be of use, or a mixture of 1 gram of liq. strychnini, 2 grams of fluid extract of condurango, and ten grams of tincture of rhubarb may be given in doses

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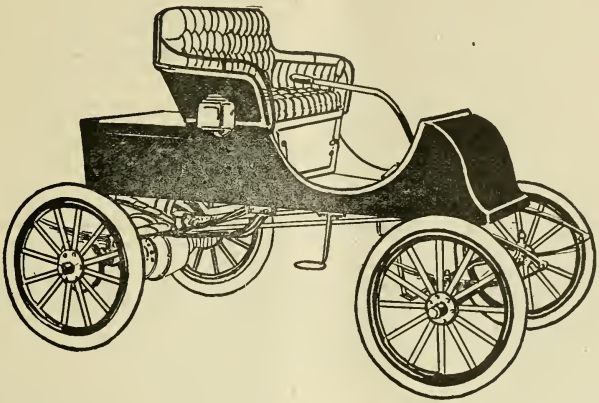

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of five drops each, fifteen minutes before a feeding, three times a day.

Infantile enteric catarrh generally occurs as a sequel of the dyspepsia, with thin, watery stools, very acid, and speedily producing intertrigo. The bad results upon the general health are not slow in appearance, and wasting sets in. The respiration is deep, difficult and frequently sighing, the pulse irregular and small. Vigorous children often exhibit a high fever which may be lacking in those of weaker constitution. The great danger to life in this condition is in collapse, and the best means to combat such a tendency is the hypodermic injection of camphor in an initial dose of 0.1 to 0.2 gram, half the dose repeated at two hour intervals. A very little tea may be given by mouth, and the body supplied with water by subcutaneous injections of saline solution, 150 c. cm. twice a day. Cold wet packs may be employed to reduce the fever, and fats should be eliminated from the diet even after the tendency to collapse is overcome. The best food is mother's milk with the fat taken out. If this cannot be had, thin barley water or other similar starchy preparation may be used. He reports some cases in which good results have been obtained by giving good full milk warmed to 40 degrees, C. and treated with pepsin, the amount of the latter, however, being double that usually indicated.

Bullet Wound of the Brain.

Veraguth (Korresp-Blatt fur Schweizer Aerzte) reports the case of a man of about thirty-three who shot himself in the forehead. He was seen five minutes later. He was lying on his back, moved his right arm and leg, but the left side was motionless. Sensation was absent for pain on the left side. An inch above the right eyebrow was a large bullet wound. After the injury the patient was conscious and asked his wife's forgiveness. He addressed the doctor, said that the wound hurt him, complained of thirst, knew his telephone number, and was quite conscious of his act and the consequences. His speech was normal in time, tone, and articulation. The wound, which bled freely, was cleaned and dressed. Then some delirium supervened, and twenty to thirty minutes later the patient was unconscious. He died in hospital eleven and a half hours later. It is indubitable that the patient was conscious shortly after his injury, and probable that he was so immediately afterwards.

The autopsy revealed destruction of a considerable part of the cortex of the frontal lobe, the anterior part of the genu of the corpus callosum and of the right corona radiata, a large subdural hematoma, opening of the longitudinal sinus, and laceration of other vessels. The total loss of brain substance which the right hemisphere had suffered in a fraction of a second was about 2.5 per cent. of the whole brain. Despite the severe brain injury, the suddenness of the wound, the shock to the cerebrum, and the loss of blood from the longitudinal sinus, the man was conscious almost immediately after the shot. The author compares the trauma of comatose apoplexy, following spontaneous tearing of brain substance with the severe injury in this case, and points out the differences, The parts of the brain rendered functionless through the shot are further from the gray matter of the third ventricle and the optic thalami than is usually the case in ordinary apoplexy. Here the increased intracranial pressure had a possibility of regaining its balance (through the bullet wound, etc.), while the pressure on the left side would be temporary only. The difference between arterial and venous rupture in apoplexy and bullet wound is obvious, and the effect of the suddenly-raised pressure was in this case quickly diminishing.

This case seems to prove that suddenly-raised intracranial pressure in man is not sufficient to cause unconsciousness. Neither the mechanical shattering of a great portion of the hemisphere, nor the increased intracranial pressure, nor even the escape of much venous blood, have caused sufficient shock to bring on a loss of consciousness lasting some time. What is of first importance in loss of consciousness in sudden brain lesions is cortical anæmia. It was not present in this case, for the bullet-track ran through the least vascular part of the hemisphere. Hence consciousness was retained. The author comments on the medico-legal importance of this case. The man had left hemiplegia after the shot (the revolver being held in his right hand), but was conscious. He might easily have killed himself with a second shot, say, in the heart. If this had happened in a lonely place, without witnesses, could a conscientious doctor, on finding such a mortal wound and the shot through the brain, have given "Suicide" as a probable cause of death?

Arteriosclerosis, Hot Baths In.

Hirschfeld, in the Australasian Medical Gazette, says that the systematic employment of hot baths is recommended by the writer as a satisfactory treatment in arteriosclerosis. The effect of the hot bath on the patient suffering from arteriosclerosis is fourfold: 1. It alters the distribution of blood-pressure by unloading the internal organs and by increasing the vascularization of the skin; hence, it affords prompt relief

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See Letter from Surgeon-General;

In reply to your letter dated November 8th, 1900, with enclosure from Robert Halford, Agent, dated Mount Lebanon, N. Y., October 6, 1900, and stating that you had sent by express two samples for "Veratrum Viride," I have to state that they were sent to Washington Barracks, D.C., for trial and found to be of excellent quality.

(Signed) GEO. M. STERNBERG, Surgeon General' U. S. Army.

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in many of the cases of pain associated with internal gout, that frequent source of arteriosclerosis. 2. It increases combustion. 3. It increases the elimination of waste products. 4. By opening the channels of the skin, it reduces the pressure of the blood by bleeding the patient into the skin. In every instance it is necessary to ascertain exactly the reaction of the individual. One may safely begin with a temperature of 102 degrees if the patient is not above 55 or 60; in women it is safer to begin at 100 degrees. The time of immersion should not be less than ten minutes, although the writer rarely had to exceed that time. The determining factor in the management of the patient is the condition of the left heart, the quality and loudness of the first and second aortic sounds. Without a vigorous left heart the hot bath must be used with caution. The indiscriminate use of the hot bath is warned against when there is not a good systematic pressure and a vigorous systolic output to start with. While these two conditions obtain in arteriosclerosis, favorable results will follow the treatment indicated.

Albuminuria and Adolescents.

Dukes, in The British Medical Journal, states that when the albuminuria of adolescents is recognized and treated, there is little likelihood of its proving the precursor of organic disease of the kidneys, even when its duration has been many years. The general treatment resolves itself into so reasonable a regulation of life as to ensure the highest state of vitality during adolescence: Work, while it may be ample, must not be excessive; and work is always excessive during the years of growth when sleep is insufficient. The hours of both must be determined according to age. Exercise should be recreation rather than physical drill, which, by the pleasurable sensations, increases the tone of the whole nervous and vascular system; and such exercise should be daily. Food should be sufficient for the provision of growth, as well as the renewal of wear and tear, bearing in mind that the adolescent requires more food than the adult, and the girl more than the boy, on account of her greater rapidity of growth. The duties of the scavengers of the body should be so disciplined as to be brought under the habitual control of the will. Natural action should not be replaced by the perpetual stimulus of aperient for this vicarious duty obviously confirms the intestines in sluggishness of work, and tends to convert a temporary inactivity into a permanent abandonment of function.

Dr. T. L. McDermott, of Louisville, Ky., writing, says the best results from Sanmetto in his hands were obtained in subacute gonorrhea and gleet, in which the results in many cases were very marked, and for this exasperating ailment sufficiently rapid to encourage the patient to continue the treatment. He says that this is in itself no small measure of praise, for all physicians are aware of the fugitive nature of these patients, their lengthened chronicity, and the painstaking attention necessary to effect a cure. He says that he has seen excellent results from Sanmetto in many cases of nocturnal enuresis, cystic catarrh, and other functional diseases of the bladder; however, its general use by the profession speaks loudest of its efficiency in these cases.

Have used your Resinol Soap and Ointment with much satisfaction. I have for years suffered at intervals with scalp itching, have used most everything with no avail until I tried a massage with the Ointment. The result was great, scalp easy, no dandruff—and hair ceases to fall out. I try to keep it on hand.—C. D. Driscoll, D. D. S., Paoli, Ind.

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Miscellaneous.

Clinical Reports of Cystitis and Other Urinary Diseases.*

Within the last quarter of a century the science of medicine has made advancements along every department, but none have been more pronounced than that made in the treatment of diseases of the genito-urinary organs. The pathology and etiology of these diseases have been studied more thoroughly than ever before, but the greatest advancement has been made in perfecting their treatment. Several new remedies have been discovered, among which the doctor will find something suitable for these various diseases. In proof of this assertion we refer to the treatment of gonorrhea which under the older plans and remedies required weeks, months, and in rare cases, years to perfect a cure. Under improved methods and new remedies it requires only a few days, or a few weeks in obstinate cases.

Two years ago we began a series of investigations with these later remedies to ascertain their value when compared with each other, and the one best suited for the different class of cases. During this investigation we were decidedly impressed with the therapeutic action of uriseptin. We found this remedy non-toxic, and one that produced the most decided antiseptic condition of the urine. This remedy sets free nascent formaldehyd throughout the urinary tract. All physicians are aware of the powerful antiseptic action of this agent. Another very important factor in the favor of this remedy is that it renders alkaline urine acid thereby destroying the media most suitable for the development of many kinds of micro-organisms. It is indicated in all diseases that require a powerful and prompt antiseptic, viz: Cystitis, pyelitis, pyelo-nephritis and specific urethritis. It is also indicated in autotoxemia, nephrolithiasis, phosphaturia, and in typhoid fever, to render the urine antiseptic and thereby prevent the spread of the disease. In other words uriseptin is indicated in any disease of the urinary tract containing blood, pus, uric acid, urates, and micro-organisms of any kind. For the benefit of those who desire to give this remedy a trial we append the clinical history of a few cases.

Case 1. Mrs. J. T. M., farmer's wife, age 32 years, mother of one child, age 7 years, family history good. Was well until June 10th when she was seized with a constant desire to urinate and complained of great pain and weight in pelvis. Her family physician was called and prescribed for her, with improvement for a short time. She then gradually grew worse until she was confined to her bed. Sept. 15th I was called and found her with great tenesmus of bladder, pelvic pain and tenderness; urine revealed pus, blood, mucus epithelium and and shreds of mucus. Patient had lost flesh, was hysterical and had lost faith in all local treatment, for her physician had douched the bladder with all kinds of solutions. This form of treatment had always given me fairly good results and I was at a loss to know what to prescribe in this case. After a few minutes' thought I prescribed the following: Absolute rest in bed; a strict liquid diet; uriseptin in teaspoonful doses four times daily with 15 grs. of the triple bromides on retiring. In conjunction with the above treatment cold baths and hot vaginal douches were given daily. Her improvement was slow but steady and by the end of the first month she was able to do a little light work. All medication was now withdrawn except uriseptin three times daily. Her recovery was uneventful.

Case 2. Mr. C. L., traveling salesman, age 36 years, nervous temperament and run-down condition. He gave a history of contracting gonorrhea five months before. Had taken capaiba, cubebs and used various kinds of injections, but in spite of all he had a slight discharge. He had also been treated by a genito-urinary specialist without improvement, and had gone for a month without taking any treatment whatever. He had been compelled to postpone his marriage on account of this unhappy disease. He said he had spent so much to get well and failed that he feared he never would be cured, however he would try once more. I told him positively that I would cure him within two months. The first thing I did was to pass the largest catheter possible to stretch all folds out of the urethra; through this I injected a pint and a half of permanganate solution. I then withdrew the catheter slowly, instructing the patient to pass the solution. This done he was placed upon strych. sulph. gr. 1-60 after meals and uriseptin in teaspoonful doses between meals and at bedtime. I also instructed the patient to abstain absolutely from all excesses of women, alcohol and malt liquors. In one week the discharge was appreciably lessened and at the end of three weeks it had disappeared altogether. He said he was feeling better than he had for a year. I advised him to discontinue the strychnine but to continue the uriseptin. He made a rapid recovery; in ninety days from the beginning of treatment he was married, and since seems to be as happy as possible.

Case 3. John E., age 21, weight 135 lbs., mechanic by profession, family history good. Had contracted gonorrhea over a year ago; was treated by his family physician and thought he was cured, but a chronic urethral discharge had returned and had continued almost constantly for nine months. During this time he had taken so much copaiba and other drugs of that nature, that he had dyspepsia and had lost considerable flesh. Injections had been used galore and he believed they had produced an inflammation of the bladder from which he was now suffering. The urine contained epithelial casts and pus, and was decidedly acid in reaction. Treatment consisted in giving an alkali until urine was neutral; then he was placed upon uriseptin four times daily and ten grs. bromide soda on retiring. At the end of three weeks the cystitis was decidedly improved and the discharge growing less. In six weeks the discharge had disappeared and patient claims to be cured. All other remedies were withdrawn except uriseptin which upon my advice was continned for a few weeks to be sure that a permanent cure was affected.

Case 4. Mr. J. S. F., age 52, merchant, weight 176 lbs. A heavy eater and drinker. Family history good except a uric acid diathesis. Consulted April 14th for relief from a constant desire to urinate which was accompanied by great burning and pain. Urinary analysis showed specific gr. 1.028 highly acid, blood, pus and casts. Rectal examination revealed enlarged prostate and tender deep urethra. Patient also gave history of loss of virile power. Treatment consisted of absolute rest in bed with hot fomentations over prostate and free purgation with Epsom salts. Uriseptin was now prescribed four times per day. The visical irritation soon subsided and other troubles soon fell into line and by the end of three weeks patient was able to go to work, although he continued uriseptin for several weeks longer which improved his virile power decidedly.

Case 5. Mrs. G. M., domestic, age 23, mother of two children, youngest two years old. Had been healthy except mild attacks of cystitis from time to time. Eight months ago an attack came on severer than the rest. Called her family physician and improved for a time, but the disease came back later with severity from which she failed to find relief. At my first call she was unable to get out of bed. I irrigated the bladder twice daily for three days, then once daily with warm boracic acid and cleared

*By C. W. Canan, B. S., M. D.

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bowels with Epsom salts. At the same time I prescribed uriseptin four times daily. Her improvement in one week was remarkable, and at the end of the second she was able to begin to look after her household duties. I reduced the doses of uriseptin to three a day and the case went on to full recovery.

Case 6. Mrs. Amanda C., age 31, mother of three children, youngest six weeks old. Was confined May 5th by midwife; suffered from retention of urine ten hours afterward; midwife after trying hot flaxseed, hop and other poultices in vain, employed a filthy catheter, and a septic urethritis and cystitis was the result. When I was called to see patient she was suffering from continued pain in bladder, an almost constant desire to micturate, with terrible burning, Urine contained blood, pus and epithelium. I at once douched out bladder with a warm boric acid solution: opened bowels with Epsom salts and administered uriseptin in teaspoonful doses every three hours until four doses had been taken, then reduced it to four doses in twenty-four hours. The douching was continued daily for three days then every other day for a week, when it was withdrawn. Patient recovered rapidly and uneventful.

Case 7. Miss Emma R., age 18 years. Only a few weeks ago went for a horse-back ride, was caught in a heavy shower and got very wet. Next morning she was unable to rise because of severe pain in back and suppressed urination. On being called I had her back dry-cupped and prescribed uriseptin every four hours until improvement began, then three times per day. This recovery was remarkable rapid and thorough.

Case 8. Mr. C. L. S., merchant, age 50, family history good. Had contracted gonorrhea when a young man but was promptly cured. During the winter of 1903 contracted a severe case of la grippe, made a slow recovery, and when able once more to attend to business he was taken with severe pain in back and a constant desire to urinate. The urine soon became turbid, and ere long was found to contain pus and blood. In spite of all the help he could obtain from several physicians he continued to decline in health. The bladder would not empty itself; necessitating catheterization twice daily. At the end of six months the urine was loaded with pus and bacteria. Sept. 1st he was sent to me. After watching the case for some time and making several analyses of urine, I began a systematic douching of bladder twice daily after drawing off the retained urine. I first used a solution of permanganate potash and would finish with a mild astringent after bladder had been thoroughly cleansed. At the end of two weeks there was no improvement and the patient was thoroughly disgusted with douches. During this time he had been taking internally a preparation containing corn silk, sawpalmetto and citate of potash. In running over the list of remedies, hoping to find something to benefit my patient I decided to try uriseptin. The patient was given one teaspoonful every three hours for two days. When the urine showed improvement I then prescribed a dessertspoonful three times daily for several weeks, and

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finally a tablespoonful night and morning. This treatment proved to be the right thing. The urine first improved, the bladder began to empty itself better, only requiring one catheterization daily. The patient's general condition began to improve and at the end of two months he returned home, but continued to take the remedy a greater part of the following winter. Last summer he paid me a visit and was in the best of health and spirits. Said he had long ago thrown away his catheter, and could now empty the bladder normally.

In conclusion, I believe that where the antiseptic effect of uriseptin is desired especially, it should be given in ordinary doses but at short intervals until the desired effect is produced, then just enough to maintain said effect. In great irritability of the bladder hot mucilaginous drinks enhances its action. If the urine be found decidedly acid and irritating it should be rendered neutral by alkaline treatment, before beginning the use of uriseptin.

The Journal of the American Medical Association

Is the official organ of the American Medical Association. That association is practically composed of members of all the State Societies of the Union. Every member of that association who pays his membership dues ($5), is entitled to annual subscription. The same price is charged to those not members. In round figures, there are about 35,000 members of that association—including a number of homeopaths, eclectics, etc., who are allowed to join by the present "re-organized" rules of the association. This membership of the National Association guarantees an annual income of about $175,000—in addition to an unknown income from advertisements in every issue of the weekly Journal, which unknown quantity, we presume, may be estimated at not less than $75,000—thus securing a total annual income of $250,000, or more. How much of this is profit we do not know; possibly $100,000. Such an amount of profit results that, not content with its own success, it is now venturing into the field of competition with other heretofore solid enterprises, such as that of making a directory of the profession of the United States, etc. We cannot believe that it was ever the purpose of this American Medical Association to assume the role of such competitions.

The Journal is the property of the American Medical Association. It should be the exemplar of ethics in the journalistic field, as well as in its dealings with the medical profession. It would seem, therefore, that it would place itself above the plane of ordinary competition with other reputable medical weeklies of the country, and avoid invidious distinctions or comparisons. Instead of adopting, however, this higher ethical course, it puts itself in comparison—both as to the total number of subscribers and amount of matter annually in its columns—with some of the most reputable medical weeklies of the country, as if to show their relative weakness in these respects. Such a course is not dignified—is not becoming—for the obvious intentional effect is to exalt the one, and pull down the others. We do not believe that the better element of the profession will sustain the management of the Journal of the American Medical Association in any such effort.

The present plan of organization of the American Medical Association has sufficiently injured enough formerly good journals by causing them to limit their spheres of subscription patronage to the State Society memberships of which they have become the so-called official organs or bulletins. The Journal of the American Medical Association has secured, through the influences of the State Societies, the salaried drummers it can easily afford to send out under the title of "organizers," etc., a patronage sufficient to let these larger medical weeklies alone in quietly fulfilling their mission as regular medical journals of high merit, and as exponents of independent views.

If the American Medical Association is annually adding material to its surplus fund by virtue of its increasing membership, there are many fields open for investment, profitable to the profession and to humanity, without undertaking to pull down enterprises that were appreciated and fairly profitable. There are many matters for scientific investigation which the individual doctor has not the means to attempt without financial assistance. From time to time, as circumstances may allow, sufficiently salaried commissions might be organized among qualified workers in the profession to ferret out the truth of reasonable suggestion in some department of medicine. Such a course would be more in keeping with higher professional sentiment than undertaking to pull down enterprises of established value.

Many other avenues of profitable expenditure of the profits of the Association, than that of entering into competition with useful business enterprises by distinct corporations might be suggested—were it the purpose of this note to do so.

We do not by any means oppose the American Medical Association. On the contrary, properly conducted, it has a legitimate field of usefulness that no other association of the profession can fill. It is only as a caution that it should cease to antagonize the honest convictions and rights of a great mass of the loyal members of the profession that we write. Otherwise, the time will come, as with some of the insurance corporations of the day, when searching inquiries will be made which may threaten the downfall of the now mighty organization.—The Virginia Medical Semi-Monthly.

The advantages of skilful pharmacy seem to be overlooked in the present outcry against proprietary mixtures sold under trade names. In an address at the Boston Medical Library meeting Dr. Frank Billings, of Chicago, stated that nearly half of the prescriptions written in Chicago and Boston call for such trade mixtures not found in the Pharmacopeia; in New York it is 70 per cent. These articles evidently fill a need and it is time to inquire whether the majority of the medical profession is wrong or whether the Pharmacopeia is defective. It must be remembered that for 50 years the official Pharmacopeia occupied a secondary place—indeed, it was a flat failure so far as filling the needs of the practical doctor. The commentary upon it, the Dispensatory of Wood and Bache, first published in 1833, and intended as a therapeutic work to popularize it, practically displaced it. About 30 years ago began the modern movement to keep the official Pharmacopeia up to date by eliminating things which the profession had ceased to use and introducing things it had found to be valuable. Of necessity, then, it is a record of progress—always behind the times and never in advance of them. The profession is constantly on the alert for remedies of greater value than the ones found disappointing—it must use everything which laboratory or other experimentation proves to be useful.

There is a constant evolution in drugs, untold thousands of which are taken up, laid aside as a rule, and the few useful ones survive to be incorporated in the official list in time as orthodox. Progress means heterodoxy or the use of things not orthodox. He who uses only those things known to be orthodox is therefore just that far behind the times and he is likely to fail, because he does not use things found to be valuable but not yet stamped as official. The first few patented synthetic compounds of value, beginning with antipyrin, practically revolutionized professional ethics in 1884, for they compelled the up-to-date physician to use

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DESCRIPTIVE BOOKLET ON APPLICATION

what was formerly condemned on principle. A few bold teachers set the pace and defiantly announced that they would use what was known to be beneficial to their patients, whether it was patented or not, in or out of the Pharmacopeia, if they knew what it was and where to get it unadulterated. There was much ill-feeling, and there was an uncertain dread among the conservative that we were undermining our foundations, but it turned out that we were only repairing them stone by stone. In advocating the use of patented mixtures, whose secret composition can be obtained for a small fee, Dr. Billings is taking a step which would have been severely condemned 25 years ago, but the quiet acquiescence of the profession in this matter shows that it has progressed far beyond the position it took upon the appearance of the synthetic compounds. It now demands prepared mixtures and the majority use them. It needs no prophecy to state that such things as are approved by Dr. Billings must become orthodox by incorporation in the Pharmacopeia or it will fail to record progress and tell what is being used by the profession. It will sink to the position it held in the first half century of its life.

Condemnation of unpatented proprietary mixtures does not seem logical. Of course no physician of sense will prescribe secret things whose composition he does not know, but once knowing them, he cannot be expected to remember the exact proportions. Not one physician in a hundred can tell the exact composition of paregoric—he does not need to if he knows its exact effects as a mixture. It was once a proprietary mixture—practically speaking if not literally so—and became orthodox because it was used by the majority of the profession, and they used it because it proved to be a good mixture. Other useful mixtures are now going through the same process as paregoric, and we are quite sure that Dr. Billings in condemning them is not voicing the opinion of the progressive element of the profession—and that is the great majority; nor are we sure there is so much danger in them as a few writers are inclined to believe. If they are inethical, so are the patented ones; indeed, we seem to be losing our bearings when we approve patented things and disapprove those not patented. We can use them without countenancing the dreadful nostrums, nor indeed need we touch the borderland articles which so often are nostrums masquerading with ethical clothing. We are in another period of a revolution in our attitude toward new drugs, and it is the part of wisdom to heed it if it is to be ethical.

The demand for good pharmacy is at the basis of the present trend of the profession. There are good reasons for the decline of the old-fashioned prescription writing. The schools are not wholly to be blamed for neglect—they merely voice the opinion and usage of the profession. Indeed, they are not always in the advance, for the great pioneers are too often the outsiders, like, Koch. Pharmacy is an art and science of itself, as we have previously observed, and a good doctor cannot become a good pharmacist without neglecting more useful things. It is generally recognized that experts can make better mixtures than can be made by the old style extemporaneous prescription which so many still advocate. The old profession trusted the small druggist, the new is trusting the large manufacturer, and one is as trustworthy as the other, no more and no less. The vast majority of the profession are filling their offices with ready-made tablets, pills and various mixtures, and are harking back to the old days when all doctors dispensed their own drugs. It is an evolution brought about by the growth of modern expert pharmacy. To be sure, they are imposed upon now and then, just as the older physicians were by fraudulent substitutions in the corner drug store. We do not condemn prescription-writing for that reason, though we should—to be logical—if we condemn the new methods.

The profession wants the most elegant preparations it can get and will get them. And they are inclined to trust the firms having large interests at stake which would be jeopardized by misstatements or substitutions. They demand advertisements, for in no other way can they learn of new things—the Pharmacopeia does not tell them. If a medical journal is to restrict its columns to merely the old—that is, if it becomes purely official and orthodox—there's an end to progress. Heterodoxy or progress demands the new and as yet unofficial. When it is satisfied the unofficial becomes official. Physicians must not be treated paternally, as though they were thoughtless babies. They do a heap of thinking and in the end generally force the leaders to be followers. Schools teach what the profession is doing. They will bitterly resent any accusation that they do not practise rationally, make no diagnoses, merely noting symptoms and treating them—a drug for each one. They demand full information on the new and are not satisfied with secret compositions on the one hand or the orthodox on the other. If officialism is to keep them in darkness as to progress they will have none of it, but will become protestants on principle. The religious nonconformists have just upset the British government by a stupendous but bloodless revolution—medical nonconformists can do the same if need be—and indeed the revolution is now on if 70 per cent. are insurgents already.

Ridiculous trade names will correct themselves in

QUALITY IS THE FIRST DESIDERATUM

The name "Warner & Co.'s" applied to a Pharmaceutical Product is synonymous with highest possible quality. A more recent production is

IODOFORMAL

ANTISEPTIC SURGICAL DRESSING

A new definite syothetic compound of Cinchonine Iodo-Sulphate, Thymol Iodide, Bismuth Oxyiodide, Boro Formaldehyde, Phenylacetamide with Phenic Acid.

Liberates Iodine, Formaldehyde, Thymol and Phenic Acid.

Acts as an Efficient Local Antiseptic, Alterative, Astringent, Analgesic and Dermal Tonic.

Samples Mailed on Request.

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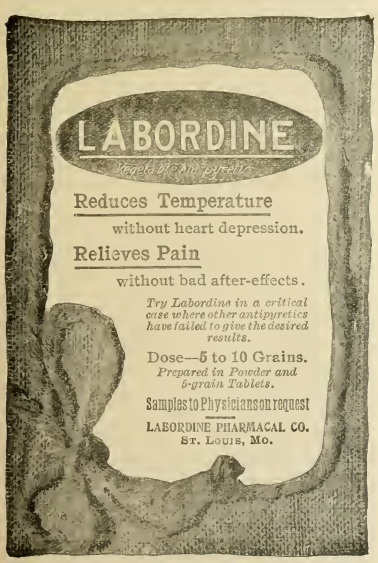

These trade-mark crisscross lines on every package.

Gluten Grits AND
BARLEY CRYSTALS,
Perfect Breakfast and Dessert Health Cereals.
PANSY FLOUR for Pastry, Cake and Biscuit.
Unlike all other goods. Ask Grocers.
For book of sample, write
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time. The manufacturers need a word of kindly advice. It is true that the barbarous chemical names given to new synthetic compounds are so ridiculously impractical that physicians demand shorter ones. It is equally true that the official titles of the Pharmacopeia are impractical for colloquial use. The "nicknames" are universally used, such as paregoric and laudanum. In neither case is there excuse for the bizarre and almost flippant catchwords generally invented for new pharmaceutic mixtures. They have so often been the means of concealing composition and have so misled—innocently, sometimes, no doubt—as to have cast great discredit upon really useful combinations. A word to the wise is sufficient.

Eclecticism has had its basis in an alleged disposition of the regular profession to reject new and useful things because they are unorthodox. There is a widespread opinion among laymen that regular physicians are too hidebound to keep up with the times. It is a false opinion, of course, but it is played upon by every eclectic who gives the impression that he is the only rational therapeutist among them all, whereas scientific medicine uses everything known to be useful. If prayer will soothe a poor hypersensitive neurasthenic, he's a brute who will not recommend it in appropriate cases, as advised by an English physician; but prayer is not in the Pharmacopeia, and it is proprietary to a certain extent in the minds of the ungodly. The present discussion is giving ammunition to every eclectic in the land who will advertise that he is using useful proprietary mixtures of known composition which are condemned as unorthodox by certain regulars. The profession needs to be protected from too much officialism and officiousness —always has had need and always will. It clings to its Aryan rights of free thought, free speech, free uncensored press, and freedom to do what's right. Any other course will be fatal to that organization which is such a crying necessity to represent every unit in the profession instead of a disintegrating autocracy.—American Medicine.

Modern surgery demands a reliable antiseptic, one that not only destroys the bacterial growth but builds up the tissues as well; one that not only acts as an antiseptic, but does not have a tendency to irritate the wound, which is so often the case with the general antiseptic. Such an antiseptic can be obtained in Campho-Phenique liquid and powder. For twenty-five years this preparation has been an acknowledged addition to the operating table of the very best surgeons in this country and abroad. Every physician should keep himself supplied with Campho-Phenique. For further particulars see our advertisement in this magazine or address the Campho-Phenique Company, St. Louis, Mo.

Endometritis.

Being a firm friend of Glyco-Thymoline for many years I have no hesitancy in endorsing it at any time. As regards my experience with it in Gynecology, will say that I have a record of some ninety cases in which I have used Glyco-Thymoline to a greater or less extent and have always found it of great value in reducing congestions and engorgements and promoting a healthy condition of the tissues.

The following cases serve to illustrate the usual method followed in applying this agent:

Case 1.—Mrs. H. G., aged 24; married three years; multipara; occupation, housewife; gave the following history: Began menstruating at age of 14 years, and had always been very regular during the menstrual period; had always had some pain which had, however, become intense during the last two. Past two months had suffered backache and pain through the pelvic region, bowels constipated. Digital examination showed the cervix to be very tender aud engorged and with some slight congestion of the uterus itself, accompanied by a profuse whitish discharge. Diagnosis of endocervitis being made, a tampon of cotton soaked in pure Glyco-Thymoline was applied and patient directed to inject small amount of Glyco-Thymoline pure into vagina twice a day. Tampons of cotton and Glyco-Thymoline were repeated every other day and patient discharged in one month cured. Aside from an occasional saline laxative no other treatment was used.

Case 2.—Mrs. M. H., aged 21; married; multipara; occupation, housewife. Came to me complaining of intense pain throughout the pelvic region, feeling of weight and bearing down sensation, bowels constipated and frequent micturition, having to void her urine from five to six times nightly which was accompanied by severe burning and tenesmus. An examination disclosed a lacerated cervix with considerable inflammation of the endometrium. Treatment consisted of tampons of cotton and pure Glyco-Thymoline applied every second day with intrauterine douches of a hot 25 per cent. solution of Glyco-Thymoline applied by means of Chamberlain's glass tube. This patient has been under my treatment for three months now and the laceration has almost healed which I expect to be complete in two or three weeks when I will discharge her, the endometrium having long since disappeared. This patient had been advised by a brother practitioner that it would be impossible to relieve the cervical laceration without an operation.

Case 3.—Mrs. McC., aged 42 years; multipara; occupation, housewife. Began menstruation at age of 13 years. Has had four children and two miscarriages. Had always experienced pain preceding periods until the last, when pain persisted throughout the week and when I first saw her she complained of most distressing backache, bearing down pains and pain generally throughout the entire pelvic region. Associated with these symptoms was considerable vesical irritation, causing her to void urine four to five times every night. An examination disclosed a slight laceration of the cervix and an inflammation of the lining membrane which extended to and just beyond the internal os. Treatment consisted of tampons of cotton and Glyco-Thymoline applied every third day and hot vaginal douches of Glyco-Thymoline, two drachms to the pint twice a day for a week, increased to three drachms to the pint for two weeks longer, at the end of which time she was discharged cured, with directions to continue the douche for two weeks longer.—J. J. O'SULLIVAN, M. D., New York City.

A Few Practical Suggestions in Pneumonia.

Each case of pneumonia presents individual points of clinical interest, but it is generally conceded by the profession that the treatment now is largely symptomatic. The mistake most frequently made is the administration of too much drug in this condition when the patient is suffering for want of proper oxygen, and as a result of this the standard of the blood is greatly lowered and the system filled with toxines. It is good judgment to combat these conditions by natural methods, viz., proper nutrition which will, as nearly as possible, give to the blood what it cannot get as a result of the conditions brought about by the disease and certainly not by drug administration. It is now clearly established that there is no specific food for this disease, consequently the symptoms arising must be combated and great care be taken not to depress the patient's vitality. It is good judgment to use drugs when indicated and to continue as long as the desired physiological results are obtained, but the doctor must not lose sight of his patient's

...RELIABLE PREPARATIONS...

Resinol Soap AND Ointment

KEEP THE SKIN RIGHT.

These are timely and handy preparations. Their utility has no bounds. They are helpful in all skin troubles. Skin inflammations, such as Sunburn, Eruptions of Poison Oak, Scalds and Burns, or those caused by the handling of chemicals, as in developing KODAK FILMS, etc., yield immediately to the healing qualities of Resinol Ointment. For Eczema, Herpes, Pruritus, Barber's Itch, etc., it is the recognized and standard prescription with the rank and file of medical men.

Resinol Soap should always be used as a prophylactic, and as an adjunct to the Ointment. Samples sent on request.

RESINOL CHEMICAL COMPANY,

GREAT BRITAIN BRANCH:
97 New Oxford Street, London, W. C.

BALTIMORE, MD.

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Chas. Markell & Co., Sydney, N. S. W.

vitality and nutrition. Prophylaxis should always be borne in mind and this can be best accomplished by sustaining the patient. In this serious condition a large clinical experience proves that the most perfect form of nutrition is found in Bovinine, and it is best to employ it in such intervals as are indicated in each individual case. Where Bovinine is employed from the outset the severity of the disease is lessened and complications are less liable to occur and convalescence is much more rapid. It should be employed from the outset until the end of the convalescence.

Phosphaturia in Genito-Urinary Diseases.

Ferd C. Valentine, M. D., Emeritus Professor of Genito-Urinary Diseases, New York School of Clinical Medicine; Genito-Urinary Consultant, Manhattan State Hospital; Consulting Genito-Urinary Surgeon, West Side German Dispensary, etc., finds Sulpho-Lythin especially valuable for correcting the digestive phosphaturia that aggravates genito-urinary infections.

I Told You So.—I said that one function of the journals of the State Associations was to be feeders of the Octopus; to whoop up subscriptions for it; and whip in members for the A. M. A. Here is proof of it. This appeared in the January issue of the Texas Tentacle, and was doubtless dictated or sent from Chicago. It didn't originate with Dr. Chase—for in the second paragraph, produced below, he kicks,—but he just had to.

The Journal of the A. M. A.—Every member of the State Medical Association of Texas should be a subscriber to the Journal of the A. M. A. It is the greatest medical journal in the world. Its bound volumes furnish the most complete medical references obtainable. Every member of the State Medical Association should likewise be a member of the American Medical Association. The Journal costs $5 a year, and all subscribers who are members of a State association can become a member of the national organization on request, and without extra expense. The Journal represents the American medical profession, and as such is the champion of national medical reforms, and worthy of our support.

Texas now stands twelfth among the States in the number of subscribers to this ournal. There are about 1100 Texas mem-

SAL HEPATICA

The original effervescing Saline Laxative and Uric Acid Solvent. A combination of the Tonic, Alterative and Laxative Salts similar to the celebrated Bitter Waters of Europe, fortified by addition of Lithium and Sodium Phosphates. It stimulates liver, tones intestinal glands, purifies alimentary tract, improves digestion, assimilation and metabolism. Especially valuable in rheumatism, gout, bilious attacks, constipation. Most efficient in eliminating toxic products from intestinal tract or blood, and correcting vicious or impaired functions.

Write for free samples.

BRISTOL-MYERS CO.,
Brooklyn, New York City.

bers of the A. M. A., which is approximately twice as many as from any other southern State. Before the end of 1906 we hope to see this number increased to 2000, that is, until two-thirds of the members of the State Medical Association of Texas are enrolled. Eleven hundred gives a fair estimate of the most progressive of the 5000 physicians in the Texas State profession.—Texas State Journal of Medicine, January, '06.

Octopus vs. Star Fish.—One of our Councilors writes calling our attention to advertisements in the Journal of the A. M. A. of Campho-Phenique, Bovinine, Pepto-Mangan and other semi-secret proprietary remedies, doubtless possessing therapeutic virtue, but unfortunately now classed among the nostrums which the Board of Trustees do not admit among the advertising pages of this Journal. He says: "I fail to see wherein the 'Octopus' may wedge in these advertisements and the 'Starfish' be deprived of this sustenance."

It is unfortunate that the State journals can not have an illustrious example set them by the great Journal of the A. M. A. in matters of clean advertising. We, however, have the assurance from the Board of Trustees that as soon as contracts expire, all objectionable advertising will disappear from the pages of our national publication.—Texas State Journal of Medicine, January, '06.

The Octopus runs with the hare for revenue, and holds with the hounds for bumcombe.—Texas Medical Journal.

Carteret County Medical Society.

At the last meeting of the Carteret County Medical Society the following officers were elected for the year 1906, viz: President, F. M. Clarke, Beaufort, N. C.; secretary and treasurer, D. S. George, Marshallberg, N. C.

SYRUP TRIFOLIUM COMPOUND WITH CASCARA.

An Effective Combination of an Alterative with a Laxative.

The superiority of Syrup Trifolium Compound with Cascara must be apparent when its composition is noted. Each fluidounce contains the active constituents of Red Clover Blossoms, 32 grains; Lappa, 16 grains; Berberis Aquifolium, 16 grains; Xanthoxylum, 4 grains; Stillingia, 16 grains; Phytolacoa Root, 16 grains; Cascara Amarga, 16 grains; Potassium Iodide, 8 grains, and Cascara Sagrada, 40 grains. The dose is from one to two teaspoonfuls, three times a day.

While it is particularly indicated in the treatment of secondary syphilis, with or without mercury, Syrup Trifolium Compound with Cascara commends itself as a general alterative. In skin diseases it evidently stimulates the action of the emunctories, adjusts the balance of waste and repair, and produces marked improvement. Many eruptive diseases are aggravated by constipation, induced by sedentary habits, and in such cases Syrup Trifolium Compound with Cascara P. D. & Co. may be regarded almost as a specific. While regulating the bowels and restoring natural peristalsis, it continues to exercise its alterative effect, which is enhanced by the elimination of waste products. In psoriasis and eczema it may be found effective when other measures produce indifferent results.

In strumous cases its favorable effect may be supplemented by combinations of iodide of arsenic, bichloride of mercury, sulphide of calcium, or iron. As it is easily borne by the stomach and pleasant to the taste, it may be taken by children for a long time without giving rise to derangement of the stomach or producing nausea.

It also proves useful as a vehicle for calcium iodide in the acne of adolescents; iodide of mercury in specific ulceration of the fauces; and for the administration of large doses of iodide of potassium in tertiary syphilis. In anemia, chlorosis, amenorrhea, etc., the most favorable results are produced by alternating it with some iron preparation.

The State Society and Association Journals.

It is a strange anomaly that students and workers in natural science, where, if anywhere, are to be found the elementary principles governing sociological progress, are usually the slowest to recognize and differentiate the true signs of the times. There be some misguided members of the medical profession who do not hesitate to express their conviction that the future of medical journalism lies with the association journal. Such a conviction can have only one of two bases; either it has its origin in an arrogant interestedness, or it is accepted ready-made at the hands of the associations themselves; for every indication of the law of the survival of the fittest is against the survival of this form of journalism.

We pass over for the moment the patent injustice and unfair competition perpetrated by these society organs against the independent journals, both as to subscription list and advertisements, both of which features of the case have been ventilated in these columns. These aspects of the matter, of course, mainly concern the relations between the journal themselves, and the medical public cannot be expected to take more than a general and altruistic interest in

GOLD MEDAL
ST. LOUIS, 1904

BRONZE MEDAL
PARIS, 1900

them. We simply point out in passing, for the benefit of those who pin their faith for the future to the association journals, that these inequities do exist, and that inequities do not as a rule constitute the securest pledge of survival, either in individuals or in institutions.

But there are other, and, in our opinion, more fundamental reasons for the decline of the association journals—considerations which affect the very raison d' etre of their existence, and strike them in a vital function, namely, their influence upon the profession at large. The unfair practices as to subscription and advertisement might be remedied, and still these fundamental disabilities would militate against the perpetuation, to say nothing of the supremacy, of the association journals. They are both negative and positive disabilities, and may be so considered.

(1) The association journals have none of the necessary elements for the sustenance of a live and healthy organism. The sunlight of publicity; the keen atmosphere of unhampered competition; the freedom from artificial restraint; the wholesome checks of criticism and correction; the free and constant admixture of new blood; all these essential factors of natural selection are inherently wanting in the association journals. Their absence is not the result of a local and remediable disability in any one direction, but a constitutional dyscrasia, due to the essential conditions of their inception and maintenance. They are like a strain of stock that has been bred in and in. They represent the concentrated and sublimated qualities of their own blood, which may or may not be a generally desirable or useful strain; but they no longer represent that natural process of selection by heterogeneous "worths" that forms the basis of genuine and permanent evolution.

The bracing and life-giving winds of competition are not permitted to circulate among these hot-house products. Every door by which such breezy influences might be in danger of entering is carefully shut. The journals are not organisms at all, but organs, dominated by a clique who dare not voice the highest interests of the profession for fear such utterances might come in conflict with some powerful element in the association of which it is a part. Criticism, in all of its wholesome corrective forms, is barred out by the ethics of the situation and the obligations of courtesy. Harmony—the unnatural stagnation necessary to the preservation of this precariously balanced existence—is the supreme consideration, and no disturbing influence, however salutary, must be permitted to breathe upon the rare exotics.

(2) But unfortunately these negative features of the association journals are not the only considerations which render them a pest to medical literature. They have one or two positive qualities, which, like the positive qualities of all unwholesome things, are pernicious and mischievous.

The first of these is that the association journals carry with them a specious authority which is unscientific and misleading. Any authority which is derived from any other source than that of intrinsic worth is foreign to the scientific spirit, misleading in its influence, and fatal to all genuine advancementr Such authority is insidious in its operation, and like Hamlet's passion "grows by what it feeds on," so that after a time the association journals come to believe that their prestige does actually clothe them with an oracular authority, the exercise of which occasionally leads them into ridiculous lengths, constantly and subtly deceives the unthinking masses of the profession, and by its assumed weight crushes out the democratic spirit in which true science lives and moves and has its being.

Another positive and mischievous characteristic of the association organs is that, while they tacitly purport to speak from the oracle, they are as a matter of fact obliged by considerations of courtesy to publish anything and everything in the way of papers and discussions forming transactions of the societies whose organs they are, utterly regardless of their intrinsic worth. These reports are frequently insipid and valueless stuff, for even association members cannot always be at their best, and the pungent and wholesome corrigents of criticism, contradiction, ridicule, and competition, are, as stated, barred out. The bulk of the literature is specialized material, with no working value to the general practitioner. But it is all "association matter," and must be given publication by the association organs in preference to, and usually to the exclusion of, live and original matter from outside sources.

Whether a journal reared and maintained under such artificial conditions, all of which are inherent to its individuality, can in any way subserve the real interests of the profession or further the real advance of medical science, and thus expect, with any show of reason, the confidence and support of the future, is left for the event to prove. Everyone is entitled to his own opinion. We believe there are still those who hold that the feudal system will at some future time supplant republicanism and democracy in this country. At all events, they would like to see it.

JOHANN HOFF'S MALT AND IRON

(PEPTONATE OF MANGANESE AND IRON.)

Is an ideal preparation to build up

BLOOD AND BODY

(Each wineglassful contains 1 gramme of Peptonate of Manganese and Iron.)

It is a Nutrient Oxygen Carrying Agent

Contains only a minimum amount of alcohol (less than 3%); is more readily absorbed into the circulating fluid than the iron preparation by itself.

Johann Hoff's Malt and Iron is of marked and certain value in all forms of Anæmia, Chlorosis and general debility.

EISNER & MENDELSON CO. of New York,

SOLE AGENTS.

Drop a postal for a free Copy of the Medical Mirror.

If you want to read a journal full of interesting editorials and original matter drop us a postal card and we shall send you a copy of the **Mirror.** The Mirror is one of the most interesting **Medical Journals** published. It is brimful of interesting and instructive matter each month. Our original matter is prepared by men in the city and country practice, and you will find it just the sort of matter you want to read.

Long-winded reports and meatless papers are barred from the MIRROR'S colums. We are really anxious to send you a copy. Write now.

THE MEDICAL MIRROR.

820 No. Grand Ave.

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Syndicates and Digestive Processes.

Rumors are rife that a syndicate of American medical journals is in embryo. Information at hand points to the possibility of three or four of the large medical weeklies entering into a combination, or Treaty of Reciprocity, with the Journal of the A. M. A. The idea of the latter seems to be to control, among other things, the output of medical literature and narrow the field to a favored few. Already the J. A. M. A., aided by the growing number of its State satellites, pretends to influence the situation and the time is not far distant when a medical man who offers his articles for publication, or permits them to appear, in journals outside the "official" circle will be declared "taboo." The argument will be about as this; Journals which do not conform to standards established by the A. M. A. "Machine" will be inethical; *ergo*, any one who supports or succors such publications will also be inethical, on the ground that "a man is known by the company he keeps."

Further news of the proposed syndicate will appear in due course. Obviously, journals entering such a combine will do so only from motives of expediency—for that self-preservation which is the first law of nature and which, otherwise, they may be helpless to secure. From what is known and expected of A. M. A. "machine" methods, however, it is anticipated by shrewd observers of the game that the final result cannot be anything but a repetition of that touching little episode which occurred when a certain lamb lay down with a certain lion. The former was invisible; but the calm, peaceful attitude of Leo left no room for doubt that the lambkin was comfortably bestowed—within !—American Medical Journalist.

Pharmaceutical Preparations are today having the searchlight of investigation turned upon them by several powerful agencies—and in the field of patent preparations some startling revelations have been made. But all of the perfected and reliable pharmaceutical products including those that are admitted to our columns—are as important to the therapeutic progress and armamentarium of the internist as are the most approved and useful surgical appliances and instruments to the work of the surgeon. The day of nauseating and irrational concoctions from the untutored prescription of the average medical man of the past, has been superceded, and the public will demand preparations that are both agreeably palatable and therapeutically efficient. For these we must turn to the splendid preparatious that are marketed by reliable houses—many of which furnish the exact formulae and all of whom name the active ingredients. In this age of nihilistic therapeutics, perhaps fostered in a measure by the pessimism of Osler, at least by his inattention to medication and therapeutic effort, and with the uncertain action of most drugs and the peculiar individual difierences in therapeutic reaction, we are lead to venture that a dosage which has been found efficient in the average case, is the dosage the physician would supply in writing his own prescription, and it is therefore in a measure unessential for its exact pronouncement. Immitations and substitutes are so frequent that a strong defense should be uttered in this world of vigorous competition of the retainment and secrecy of the exact component formulae of reputable proprietary houses.

The Buncombe County (N. C.) Medical Society propose to eliminate house flies from the houses of Asheville the coming summer. The scheme is to be presented to the Board of Health at its next meeting. We understand that the proposition is on the conditiou that if the promoters are not successful they receive no pay.

A Plea for the Tablet.

"In the first place, compared with pills, tablets have no insoluble coating nor, when properly made, have they any insoluble excipient added to their composition. For example, antikamnia tablets are made by simple compression, and therefore, if the secretions of the human system affect the medicine administered, it is bound to be absorbed in the quickest possible time, which is always an advantage. Comparing tablets with capsules, greater accuracy in dosage is assured, as experiments have proven. For example, forty tablets of Bisulphate of Quinine, made on a machine, adjusted to five grains each, weighed 199 3-4 grains on a torsion balance. The most careful druggist knows it would be impossible to do this in filling capsules. The objections some have to tablets is readily overcome by crushing them before administration and we are glad to know that the Antikamnia people take the precaution to state that when very prompt effect is desired the tablets should be crushed or chewed. Antikamnia itself is not unpleasant to the taste, and the crushed tablet can be placed on the tongue and washed down with a swallow of water. It so frequently happens that certain unfavorable influences in the stomach may prevent the prompt solution of tablets, that this suggestion is well worth heeding. This, however, does not apply to Antikamnia Tablets, for they disintegrate at once, as soon as they come in contact with moisture. Drop a tablet in a glass of water and be convinced of this. Proprietors of other tablets would have better success had they given more thought to this question of prompt solubility. Antikamnia and its combinations in tablet form are great favorites of ours, not because of their convenience alone, but because of their prompt and uniform therapeutic effect."—The Journal of Practical Medicine.

Eclamptic Convulsion Occurring Fourteen Days After Confinement.

George Cuscaden reports this case. Fourteen days after the patient's confinement, on her return from a call across the street, she was seized by an epileptic form of convulsion lasting thirty minutes. Six hours later another fit, lasting twenty minutes, occurred. The muscles of the nostrils and the face moved spasmodically, and the mouth was drawn to one side. The tongue was bitten, thumbs were applied to the palms with the fingers over them, and the forearms were flexed. A condition of slight coma followed. The patient became half conscious and answered when spoken to. The urine contained albumin. The temperature after the fit was 102 degrees, and the pulse was 120. Several fits occurred later, but were not so severe as the first one. The patient is now in good health and eats and sleeps well. There is no albumin in the urine. This patient was thirty-three years old and a primipara. The important factors in the causation of eclampsia are faulty metabolism and impaired secretion. The writer states that he has had good results with thyroid extract treatment. In the present case he advised rest in bed with milk diet. —The Australasian Medical Gazette.

My oldest son was troubled with a skin eruption on his chin and forehead (between the eyes) which he seemed to have caught at school. It resembled a ring worm in some particulars, but was very stubborn, and hard to cure; so I sent to you for samples believing, through past experience with Resinol, that it would do the work. After the first application I could see the improvement, and inside of a week his face

In pneumonia warmth is important because cold skin means contracted cutaneous vessels, and this means increased congestion of the pulmonary vessels."

Dr. J. E. Winters to the N. Y. Academy of Medicine.

Antiphlogistine

is the only practical method of applying heat to the chest walls is

PNEUMONIA
PLEURISY
BRONCHITIS

"Completed Dressing",

without frequently disturbing the patient. It depletes the visceral blood vessels by flushing the superficial capillaries —bleeds but saves the blood.

The circulation is thus favorably affected, congestion and pain are relieved, the pulse improves, temperature declines, the muscular and vascular systems relax and rest and sleep usually follow.

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JOHN HUSSON, M. D.,
418 W. 124th St., N. Y. City.

PROPRIETARY MEDICINES AND PROFESSIONAL IGNORANCE.

In the discussion of the patent and proprietary medicine question it seems to be always taken for granted that the physician and the public are appealed to by these pharmaceutical preparaions upon essentially different grounds. It is of course generally conceded that the appeal to the public rests upon the public ignorance of things medical. The subjection of the profession is supposed to be accomplished by a species of hypnotism on the part of the manufacturer in which various professional and commercial elements play the part of the handpass. It does not appear to occur to any except the astute manufacturer, and he is hardly the man to exploit it, that the weakness upon which he plays in the professional man is the same in its essence as that by which the layman is captured, namely, ignorance of things medical.

To be sure there is a difference, but only of detail and degree. The layman is completely in the dark. He does not know what ails him; he knows less about the remedies that are applicable to his complaint (if indeed he has any complaint); and still less about the preparation of the drugs which, if he knew what ailed him and what he needed, he might order from a responsible druggist. To him in his unsophistication comes the proprietary medicine man, and kindly undertakes to identify his disease, prescribe the medicines, and furnish him with the latter conveniently prescribed, all at one dollar per. What wonder if in his pardonable ignorance he falls a willing victim to the alluring scheme.

Now let us see how the thing works in the case of the physician. It is to be presumed that he knows what ails his patient. We will assume that much for the sake of peace in the family. It may also be conceded that he knows, or thinks he knows, what medicines are applicable to the case. So far he has the advantage over the layman, and cannot of course be hoodwinked by any drug man, and nobody knows this better than the drug man. Pursuing the comparison another step, if the physician has received and availed himself of a thorough and efficient course in materia medica, he is equally well informed as to the preparation, combination, dosage, etc., in which it is desirable for the remedies to be administered to his patient, and will himself instruct, by a written order on a pharmacist, precisely the material and the form of it that the patient is to have.

* * *

Unfortunately, this latter point is the very point at which the average physician, and indeed a good many physicians who in all other respects are far above the average, are found wanting. Unfortunately, the medical colleges of this country, with few exceptions, make either no provision at all, or very little provision for a practical course in materia medica. In many colleges there is not even a chair on the subject, it being administered by an instructor as an adjunct to the chair of theory and practice of medicine. There is a lamentable disposition to regard it as a minor and relatively unimportant subject. The consequence is that the great bulk of American medical students, when they emerge into practice, while they are well trained in diagnostics and applied therapeutics, are utterly incompetent to lay out for their patients a detailed course of medication because of their ignorance of materia medica.

These men in their technical helplessness, eagerly grasp at those ready-made preparations the remedies needed which the proprietery medicine man, keenly alive to the situation, brings to their attention. Nor is this the worst of the matter. For it is quite conceivable and perfectly reasonable that a physician whose knowledge of drugs was all that could be desired might yet find it desirable, or even preferable, to employ a well compounded preparation of the drugs required. But the kernel of the mischief consists in the fact that the physician who is ignorant, as it is to be feared the great majority are, of practical materia medica, is as ignorant of what constitutes a proper preparation of his remedy as a layman, and presents an equally eligible mark for the smooth-tongued pusher of proprietary wares—nay, a far more vulnerable mark, because he cannot well avail himself of the plea of ignorance which is open to the layman.

We believe that it is here that the real crux of the proprietary and patent medicine problem is to be found, and here that the discriminating function between the commendable and the objectionable, the genuine and the fake preparations must be exercised. It is not a question of ethics but of education, not a subject for legislation but for instruction. It is of little use compelling the manufacturers to disclose their formula, or instituting analyses of their products, when the rank and file of the profession do not know a good preparation from a poor one. Instead, let us give our medical student a thorough major course in practical materia medica, so that the proprietary man will be compelled to "show him" in order to sell him. We may then confidently leave the separation of the wheat from the tares to a process of natural selection.—Medical Standard.

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THE MOAT AND THE BEAM.

Billings, in his screed against all and singular proprietary pharmacals, spells "emmenagogue" with one "m," and calls all ready-to-give medicines "secret nostrums." That is about like saying "a bovine bull" or a "canine dog" or a feline cat" or a "pyrotechnical display of fireworks" or a "subcutaneous incision under the skin," and is equal to saying secret "secret remedies" for a "nostrum" is a "secret remedy." Simmons says that "superstitious" is derived from the Latin superstet, and means "a survivor." Webster says it is derived from superstare ("super" and "stare"), and means to "stand over." I only mention it to show what a clam Webster is, compared to the Octopus fellow.—Texas Medical Journal.

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THE CONCEIT OF THE REFORMERS.

Dear Drs. S. and B.:

"Suppose the world don't suit you,—nor the way some people do,
Do you think the whole creation should be altered just for you?"

The indiscriminate use of pharmacal preparations by the medical profession would be an evil which no one denies. The judicious use of certain high-grade preparations known and tried for years and satisfactory, is quite a different thing. It is held that every physican worth mentioning is quite capable of discriminating in the selection of his remedies and to judge of the "ethics" of his practice. They will not be influenced in the least by the dictation of the Octopus and Dr. Frank S. Billings. The undertaking by a coterie of "I-am-holier-than-thou" gentlemen to usurp the privilege of the physician to think for himself and to choose for himself, and to dictate to him, is high-handed and impertinent. The physician will not take up everything advertised and "sampled," but he will still use many elegant and trustworthy preparations which he has found to be reliable, and he knows perfectly well what he is doing when he orders them. If not, he knows perfectly well that the proprietors will furnish the formula on request. The contention of the self-constituted reformers is that the formula should be published, and the boycott is used in many shapes to compel it. Were this done scarcely a bottle of a genuine article could be had, for the retail druggist, the doctor's greatest enemy,* would put up "something just as good" every pop. Besides, this undertaking to sift out the proprietaries is the duty of the United States government, and Mr. Yerkes, the Commissioner of Internal Revenue, is at present engaged in the task. I understand that bromidia falls under the ban of the Octopus, and is proscribed. To my certain knowledge the formula of bromidia was published as early as 1879, and I used it in practice.

The medical press, excepting the tentacles of the Octopus, is, so far as I can judge by my exchanges, resenting this boycott business, and the journal that does not do so is the exception. The New York Medical Record says, "the medical profession are not children, who require a nurse to see that they do not burn their fingers."—or fall in the slop pail. If the trustees are wise they will call off the hounds and sit down on Billings.

In this connection I beg to submit the following, respectfully dedicated to ye self-righteous reformers of medical ethics:

"A jelly fish** swam in a tropical sea,
And he said: This world consists, solely of ME:
Now, all that I learn from the sense of touch
Is the fact of my feelings viewed as such.
But to think that these have an external cause,
Is an inference clearly against logical laws,
Again, to suppose, as I have hitherto done,
That there are other jelly fish under the sun,—
Is a poor assumption that can't be backed
By a jot of proof, or a single fact;
In short, like Fitchte, I very much doubt
If there is anything else at all without:
And so, I've come to the plain conclusion,
If the question be only set free from confusion.—
That the universe centers solely in ME,
And if I were not,—then, nothing would be."

The Charlotte Medical Journal.

Vol. XXVIII CHARLOTTE, N. C., APRIL, 1906. No. 4

Goitre and its Treatment *

By Stuart McGuire, M. D., Surgeon in Charge St. Luke's Hospital, Richmond, Va.

The number of cases of goitre that have recently come under my observation causing marked disfigurement, incapacity to work, or seriously threatening life, has lead me to study the subject and to prepare this paper. I have nothing new or original to present, but the subject is worthy of attention and will for a time at least give a fresh field for thought to the physician who attributes almost every ill to which human flesh is heir to the hook-worm, and to the surgeon who looks on every abdomen as full of potential evil or a possible Pandora's box.

The importance of goitre is fully appreciated abroad where in certain sections its victims fill the hospitals and cannot escape the observation of the casual tourist.

In Virginia and the Carolinas the disease is supposed to be rare, but almost every doctor will tell you that he has several cases in his practice. When these patients apply for treatment they are usually told to paint the growth with iodine, and failing to secure improvement and being given little encouragement to try other measures for relief, suffer in silence and go handicapped through life to frequently a premature death.

Only a certain proportion of cases of goitre require surgical removal of the growth, but the need in this class is urgent. The patients that come to me are not usually sent by physicians, but by friends. When the profession is educated to the advances that have been made in this line of work there will, in my opinion, be found an abundant material in our midst to add yet another specialist to the field of surgery.

Goitre is a swelling of the thyroid gland, not due to inflammation or to a malignant tumor. The enlargement may involve only a small portion of the gland, or one lobe, or both lobes, or both lobes and isthmus. The disease is roughly divided into ordinary goitre and exopthalmic goitre. The ordinary form occurs in one of three varieties, the parenchymatous, the adenomatous, and the cystic. *Parenchymatous goitre* is due to a hypertrophy of the entire gland. It does not appear first in one lobe and then in the other, but the entire gland usually enlarges symmetrically. *Adenomatous goitre* is due to the growth of one or more adenomatous tumors in the substance of the thyroid. There may be a single adenoma, but usually there are more than one. The enlargement begins in one lobe and the growth is not symmetrical. *Cystic goitre* is due to the presence of a cyst or cysts in the gland. They may form from a coalescence of overdistended thyroid vesicles, or from a mucoid or colloid degeneration of adenomata, or from an extravasation of serum or blood into the tissue. *Exopthalmic goitre* is an unusual type of the disease, where the thyroid is only slightly and symmetrically enlarged, but the condition is attended by grave constitutional symptoms such as rapid pulse, palpitation, tremors, nervousness, breathlessness on slight exertion, and protrusion of the eyeballs. The cause of goitre is not definitely known. Sometimes a number of people in a community are attacked (epidemic goitre); sometimes it is always present in a certain section (endemic goitre); sometimes only an isolated case occurs (sporadic goitre). Goitre is common in the valleys at the foot of certain ranges of mountains in Switzerland, Italy and France. It is so common in one county of England as to be called the Derbyshire neck. In our country it is most frequently seen in the mountainous sections. A gentleman from southwest Virginia tells me he remembers when a boy seeing on Court Day a number of men with goitres so large that they had to be supported in a bag.

Goitre may be due to hereditary influences, unsanitary environments or bad habits of living. As a single etiological factor the effect of drinking water which results from melting snow has perhaps the strongest support. The most prominent symptom of goitre is an enlargement of the thyroid gland, the swelling following the movements of the larynx and trachea on deglutition. This is not pathognomonic, however, as it is also seen in hyoid cysts, and is not present when a goitre is anchored by adhesions which sometimes develop after infection or malignant degeneration.

The size of a goitre varies greatly, as does also the shape. If both lobes are involved the growth is symmetrical. If only one lobe is affected the growth is upon one side, although later it may so displace the windpipe as to appear central. A goitre sometimes changes its position and then is called a wandering goitre. It may become substernal, interthoracic, retrotracheal, or retroesophagal.

*Paper read at the meeting of the Tri-State Medical Association of Virginia and the Carolinas, held at White Stone Lithia Springs, S. C., February 27th-28th, 1906.

The growth of the goitre may cause serious pressure symptoms. Obstruction to circulation gives rise to enlargement of the veins of the neck and face, irritation of the recurrent laryngeal nerve to a reflex cough or metallic voice, mechanical interference with the larynx, trachea and esophagus to difficulty in respiration and deglutition. The course of a goitre cannot be predicted. It may shrink and disappear, it may remain nearly stationary, enlarging temporarily at the menstrual period and during pregnancy. It may grow slowly or rapidly. It may undergo alteration in shape and consistency due to degeneration. It may become malignant.

If a goitre is fairly symmetrical it is usually parenchymatous; if it is not symmetrical it is either adenomatous or cystic. If it suddenly enlarges it is due to internal hemorrhage. If it does not produce pain on swallowing it is usually benign. If it causes pain it is most likely malignant.

The medical treatment of simple goitre consists in the administration of thyroid extract, iodide of potash or arsenic, and the local application of tincture of iodine or red oxide of mercury ointment. With the exception of thyroid extract in a limited number of cases of parenchymatous goitre these remedies are absolutely without effect. Many cases of goitre, especially those which begin about puberty, tend to spontaneous cure and the use of the drug treatment on these patients has given it what little confidence it at present possesses.

Electricity, the mysterious agent which has promised so much and accomplished so little of real therapeutical value, has also been tried. Electrolysis and cataphoresis have about been abandoned and the X-Ray is now being used experimentally. Practically the treatment of goitre consists in the use of placebos in the early stages with the hope of an arrest of growth and spontaneous cure. Later, should developments prove the necessity of intervention, an operation should be done before local or general conditions make it hazardous. The indications for an operation may be classified as follows:

1. Rapid growth.
2. Marked deformity.
3. Interference with respiration.
4. Infection and inflammation.
5. Suspicion of malignant disease.

The last is the most important. Carcinoma of the thyroid is more common in the young than is generally supposed. It is usually indicated by the development of small irregular tumors in the gland. An early operation gives the only chance for life.

Of the numerous surgical procedures formerly practiced but two have stood the test of experience, namely, extirpation and enucleation.

Extirpation consists in the removal of a portion of the gland, together with its capsule. Usually only one lobe is taken out, although sometimes both are extirpated. Some of the gland substance must be left or else myexdema will develop. The operation is effected through an incision across the neck at the collar line. The capsule of the gland is exposed and separated from external parts. Vessels are tied before being cut. The superior and inferior thyroid vessels are ligated, care being taken to prevent injury to the recurrent laryngeal nerve. The lobe is then lifted from its bed and dislocated from the wound. The isthmus is crushed and tied.

Enucleation consists in the removal of tumors or cysts from the substance of the thyroid. The gland is exposed and an incision is made through its capsule and tissue until the tumor or cyst is reached. As a rule they can readily be recognized by a difference in color and consistency. They are enucleated by blunt dissection; hemorrhage is arrested by ligating bleeding vessels, and the resulting cavity loosely packed with gauze.

The choice between the two methods described will depend on the character of the case. Indications being equal excision is preferable to enucleation. It gives the surgeon better control over hemorrhage and the patient great assurance against recurrence.

Kocher has operated on over three thousand cases of goitre with a death rate of less than one-third of one per cent. With this wonderful experience and result he is naturally regarded as the greatest authority on the disease. In the last edition of his work on operative surgery he says, "Medicinal treatment, still so often employed by the physician and persevered with to the patient's detriment, can have no effect and is therefore unjustifiable. As soon as a goitre produces dangerous symptoms, viz., obstruction to respiration and a tendency to asphyxia, or when it undergoes inflammatory changes or assumes the slightest suspicion of malignancy it should be removed by operation." Kocher earnestly advises the local use of cocaine as a substitute for general anesthesia in these operations. I am told, however, by a physician who has just returned from his clinic, that while he practices what he preaches on charity patients, he almost invariably uses chloroform or ether in his private work. I am informed that in his clinic patients are placed in a half sitting position in a chair, with arms lashed to the sides, and chest and forehead

fixed with broad straps. A scratch is made across the throat with a knife to show the assistant the line to be injected. The skin is then incised and the operation completed with manifest suffering. Personally I have done all my operations for goitre under chloroform. I began the practice because I feared owing to my inexperience I would encounter difficulties and perhaps do awkward work. I have continued to use a general anesthetic, as I have seen no bad effect from it. I realize that there are certain cases where cocaine would be safer and when I encounter them I will use it, but as will be readily appreciated it is less taxing on the nerve of both surgeon and patient to have the victim unconscious when the throat is cut. I have never had a fatality in over 10,000 administrations of chloroform and hence have little fear of it. The only logical argument for the routine use of cocaine in operations on goitre is that owing to the patient's ability to talk the recurrent laryngeal nerve can be identified by the change produced in the voice when it is touched with an instrument.

The danger of excessive or uncontrollable hemorrhage which is the uppermost thought in the mind of the surgeon in his first few operations for goitre is unwarranted. By ligating vessels at two points before cutting, and carefully catching bleeding points as they appear, the amount of blood lost is trifling. The real danger is the development of acute thyroidism after the operation from the absorption by fresh surfaces of juices squeezed from the thyroid gland. In one of my cases this result ensued and the patient had rapid pulse, high fever and some delirium for two or three days. Fortunately the intoxication did not prove fatal. This complication must be guarded against by handling the gland gently and avoiding unnecessary manipulations in its removal. Also by the provision for free drainage. Some surgeons cover the divided isthmus with the capsule of the gland; others paint all raw surfaces with Harrington's or adrenalin solutions. Others rely largely on saline transfusion given just before the operation is completed, claiming that it so fills th vessels that absorption is prevented.

In conclusion permit me to say a few words with reference to the most advanced theories in regard to exopthalmic goitre. Until recently these cases were treated medically by rest in bed, ice bags over the heart, and the internal use of ergot, bromides, digitalis and belladonna, and surgically by the resection of the cervical sympathetics or the excision of the major part of the thyroid gland.

It was noted that myxedema and exopthalmus were the antithesis one of the other. Myxedema was due to a deficiency of thyroid secretion and characterized by slow speech, mental dullness and sub normal temperature; while exopthalmus was due to an excess of thyroid secretion and characterized by rapid pulse, mental exhileration and excitement. Thyroid extract was found to cure the first and be harmful in the second. If a specific had been found for the one why could not one be discovered for the other. The first experiments consisted in injecting the blood of a patient suffering from myxedema into a patient the victim of exopthalmus. Unmistakable good resulted.

As the symptoms of exopthalmic goitre are believed to be due to overactivity of the thyroid gland and an intoxication of the system with thyroid secretion, the treatment should be an effort either to check the secretion or to neutralize the poison. The physiological function of thyroid secretion is to neutralize some toxin produced in the course of metabolism. Theoretically the blood of an animal whose thyroid has been removed should contain the toxin which would combine with and neutralize thyroglobulin. There is a serum now on the market prepared from the blood of sheep whose thyroids have been removed. It is too early yet to tell its practical value. There is every reason to believe, however, that some specific of animal origin will shortly be discovered that will act as beneficially on exopthalmic goitre as thyroid extract does on myxedema.

Fads.

By H. C. Buck, M. D., Friars Point, Miss.

It is a melancholy truth that we of the medical profession are prone to follow fads and fashions. If one will take the time and trouble to go back in the history of our profession and note the many theories advanced at different points, that for awhile "flourished as a green bay tree," then died or was layed on the shelf for something "later," he can but feel that the great majority of our profession allow the "other fellow" to do their thinking, while they seem content to accept any dictum the "other fellow" launches on the troubled waters of medical science, yet there is very little that is new being given us, while I am glad to admit that our profession has made gigantic strides in many things, I know there are some things considered new that are quite aged. In a recent copy of the Journal A. M. A. is an article "Medical History Errors" in which the writer says, "Few things have been more encouraging in recent medical literature than the renewed attention which is being paid all over the world to the history of medicine. Noth-

ing is more chastening than to find how many of the discoveries that are thought to be very modern are only re-discoveries of the principles that were discussed by men many centuries ago,"—"Another interesting phase of this subject has been the larger sympathy that has developed for these early workers in medicine and the realization of how much they accomplished and under what apparently discouraging circumstances."

A few years ago some one made the startling discovery that the little appendix virmiformis was a terrible menace to public health and life. Almost immediately there was quite a serious epidemic of appendicitis and the cities and larger towns were full of appendicitis doctors (like the poor, they are still with us) who were ready, willing, yea, exceedingly anxious to annihilate the appendix. As a matter of fact as far back as 1842 Dunglison in a work on practice writes of this disease and its treatment, but as Abdominal Surgery was not understood as well then as it is now, those old fellows were not so ready to cut. So strong was the hold this "fad" had upon the professional and public mind it was unsafe for a man (not so dangerous for women) to have an abdominal pain, lest some fellow would want to take out his appendix. I had a patient a few years ago who had an attack of acute indigestion, with some pain in the left side of the abdomen. He was very much excited over his condition and said to me, "Doctor, I want you to tell me the truth, it wont scare me, (he was then scared nearly to death) haven't I got the appendicitis?" I said, "my friend I am very sorry to say you have, but how you ever got your appendix over on your left side is a mystery I am not able to solve. Every one else that I know wear theirs on their right side." He said "you go to h—l," but his pain got better at once.

I fear I would use too much of your valuable space were I to even try to mention *all* the "fads" that have flourished and passed away. One of the most popular at present is—shall I call it Oslerism? Where the younger members of the profession seem to look upon we old fellows as interlopers who are infringing on their rights and privileges and seem to feel that we should "go way back and sit down," or else take the chloroform route and make way for those who have not reached the magic age of forty. One writer whose article appeared in an issue of the Journal of A. M. A. advocates the doctrine that *all* medical text-books after being in print ten years should be burned, and makes the fearful statement that those old books are really the cause of more fatalities than all the epidemics the human family has had to contend with. If the writer of the article mentioned would read those old books and compare their teachings with those of our latest authorities, he would hang the whole lot for murder, for mortifying though it be (to some people) the teachings of sixty years ago (in regard to many diseases) are very, very similar to those of today Fifty years ago bloodletting was routine practice, today it is recommended as being good in some cases.

We of the South generally "go the whole hog" in everything, but some of us are a little slow in swallowing the *whole* mosquito theory as regards malaria. That the anopheles can and do infect us with malaria we are free to admit, but that we are dependent solely on "her" for our supply, I, for one, seriously doubt. In January when the temperature was considerably below the freezing point and we had had no mosquitoes for several months, I had under my care one or two severe cases of malaria. Now I know these people so well and am so familiar with their improvident habits (they rarely save anything) that it is hard for me to believe they have had this mosquito infection stored away ever since last summer. I am more inclined to the opinion that when a Southern man *wants anything* he goes after it, hence when Mrs. Anopheles can't furnish him with malaria, he takes it any old place that he finds it. Seriously is it not better for each of us to adopt the maxim given by Thomas a Kempis, "Mark not who said this or that, but mark what is spoken."

"Fads" we *will* have, perhaps *must* have, but surely it is the part of wisdom to *think* for ourselves, study clearly the theories advanced on *their* merits, *not* on the merits or reputation of he "who said this or that."

Truly it is only by the cultivation of independent thought and investigation that we can learn to "*prove all things*" and detect and hold fast the true, while we reject the false.

We often learn valuable lessons from humble and obscure sources.

The Possibilities of Appendicitis Have no Limitations.*

By John B. Leaver, M. D., Surgeon in Chief German Hospital, Philadelphia, Pa.

The subject of appendicitis is entirely too large to be discussed in detail in the time allotted to me this afternoon, therefore, I can only attempt to call attention to some of the more important conditions which we should always have in mind when dealing

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with acute abdominal pain.

There seems to be no limit to the destructive possibilities of an acute attack of appendicitis allowed to run its course, untrammeled by prompt and early surgical interference. In the course of a large and varied experience with this disease, the list of cases numbered by thousands, the writer has met complications involving nearly all the vital organs of the body. It is some of these possibilities that will be brought to your notice for discussion. The foundation upon which the entire structure of the successful treatment of appendicitis is reared is diagnosis. The diagnosis here, as in all intraabdominal conditions, should be established definitely, or at least within the bounds of reasonable doubt. Opening the abdomen for diagnostic purposes is contrary to my belief and practice. No one unable to make a reasonable diagnosis is justified in opening the peritoneal cavity. I am quite willing to acknowledge that there are conditions when the symptoms are so complex that an absolute differentiation is impossible; under these conditions I am inclined to think it better not always to operate. I do not claim that errors in diagnosis do not occur, and far too frequently, but the man who makes the fewest mistakes in diagnosis is the safe man,—the dangerous one, the man who never makes mistakes.

The eliciting of a careful history in all cases is most essential. Pain, tenderness and rigidity are three symptoms so commonly met with in the early stages of acute appendicitis, that they have been appropriately termed the "Cardinal Symptoms." They occur as a rule in sequence and, in the majority of instances, point definitely to the diagnosis. One might describe a typical attack as follows:

A patient previously well is suddenly attacked by acute abdominal pain, soon followed by nausea or vomiting, or both. The pain at first may be general or confined to the epigastrium or umbilical region, but in the course of a few hours is referred to the right iliac fossa, usually after the nausea and vomiting have ceased. Pain may be referred to the left iliac fossa, as is frequently the case when the appendix is located in the pelvis. Following the pain there is tenderness and rigidity of the lower right quadrant of the abdomen. With the classical symptoms the diagnosis is comparatively easy, but unfortunately we do not always have so easy a road to travel.

While there are a few acute abdominal conditions which give rise to the symptoms just described we must never for a moment loose sight of the fact that appendicitis is the most common acute intraabdominal affection. Among the more common conditions, however, which give rise to symptoms so closely resembling those of acute appendicitis of the fulminating type that a differential diagnosis may be impossible are: perforated, gastric or duodenal ulcer, more particularly duodenal, in which the inflammatory exudate is disposed to travel downwards in the direction of the right iliac fossa; acute pancreatitis; acute inflammation of one or more of the mesenteric glands in the terminal part of the mesentery of the small intestine; perforation of typhoid ulcer in that variety of typhoid fever commonly called walking typhoid; acute cholecystitis in a gall bladder placed abnormally low. There are other conditions such as: ruptured extra uterine pregnancy; ovarian cyst twisted upon its pedicle; nephritic colic and so forth, but these conditions are so commonly met with that I will not consider the differentiation between them and the subject under discussion.

In ulcer of the stomach and duodenum there can be elicited a history of gastric disturbances in about eight per cent. of cases only. The overwhelming character of the pain, the absence of vomiting, the limitation of the pain or its reference to the shoulders or intrascapular region. The general abdominal pain is subsequent to the initial local pain; the association of profound shock or collapse; the shallow rapid respiration; the rapid thin pulse; urgent unquenchable thirst; a normal or subnormal temperature; scanty urine, amounting at times to suppression; the early rigidity of the abdominal muscles and subsequent slow distention. The tenderness is not sharply localized it involves the whole abdominal wall, but is most intense in the upper half. If these cases are not seen immediately or soon after rupture has occurred and if only a negative history is elicited, the diagnosis is more complicated as the visceral contents, in the case of the stomach, escaping into the lower abdomen occasion general peritoneal irritation soon followed by general peritonitis, and in the case of the duodenum, the initial peritonitis commencing in the right side of the abdomen. In the presence of a diffuse or general peritonitis and in the absence of a clear history, palpation, percussion and auscultation can only be relied upon in making the differentiation, and in many instances these will be of no avail.

In rupture of a duodenal or a pyloric ulcer the diagnosis is more complicated as the visceral contents will run down to the right iliac fossa giving rise to a peritonitis, which from its location and rapidity makes a differential diagnosis well nigh impossible. Here again the history of previous gastric or intestinal disability is of great importance. The rapid onset of collapse which

is rare in acute appendicitis, with the location of the primary tenderness and rigidity will serve in many cases to clear up the doubt.

Acute pancreatitis is to be expected when a previously healthy person, or sufferer from occasional attacks of digestion, is suddenly seized with violent pain in the epigastrium followed by vomiting and collapse, and in the course of twenty-four hours by a circumscribed epigastric swelling, typamitic or resistant, with slight rise of temperature. Halsted (1) lays stress on two symptoms of acute pancreatitis. The excessive pain, and cyonosis of the face, and of the abdominal walls.

Acute suppurative inflammation of one or more of the mesenteric glands of the terminal portion of the mesentery of the small intestines may be mistaken for appendicitis. Even with fairly acute symptoms the enlargement may be due to typhoid fever in its earliest stages. A differential diagnosis is in nearly all cases impossible. The abdominal pain which occasionally precedes the development of acute gonorrhoeal epididymitis may be due to involvement of pelvic glands, as well as to inflammation of the peritoneum at the site of the internal abdominal ring. Both these causes should be borne in mind in doubtful cases. 1. Halsted: Johns Hopkins Hospital Bulletin, 1901, No. 121, 122 and 123. In a case reported by Hamann, a tumor formed by an acute tuberculosis of the iliac lymph glands was mistaken for a peri appendicular exudate.

Perforation of typhoid ulcer can be very readily mistaken for acute appendicitis. Indeed perforation of the appendix during the course of typhoid is not an unfrequent occurrence and should always be looked for. Two cases which happened recently will serve to illustrate both conditions and will be quoted briefly:

J. et. 43., Teamster.—Previous and family history negative. Eight days before admission to the German Hospital, patient was suddenly seized with sharp pain in the right iliac fossa, which was followed by headache, lassitude, malaise and stiffness of lower extremities, diarrhoea, seven or eight watery stools daily. Two days before admission had an attack of vomiting, no epistaxis. Patient walked into the hospital seeking admission, all the symptoms but pain persisting. Examination at time of admission, face flushed, breath fetid, tongue coated, heart and lungs negative. Abdomen scaphoid, no tenderness, no rose spots. Temperature 100 6.

Two days after admission patient developed general abdominal pain, sharp and cramp-like. Temperature rose to 105. Pain relieved by passing flatus and temperature fell to 101. The following morning the pain and tenderness became localized in the right iliac region associated with muscular rigidity and moderate distension. No shock. The diagnosis was appendicitis and his abdomen was opened twelve hours after onset of the pain.

Leucocytosis 10,000; Widal negative. The appendix was congested and surrounded by exudate, coils of ileum were found matted together and showed ulcerated areas through the thinned walls. Separation of the coils demonstrated a 2 cm. hole in the ileum through which fecal matter escaped. The patient subsequently made a good recovery, having run the full course of typhoid fever.

Miss —, aet. 16.—Had been complaining lassitude and headache for a week or ten days prior to day of examination Shortly after rising she complained of sudden sharp pain in the right iliac region, she was decidedly tender over McBurney's point and the right rectus was markedly contracted. A slight touch caused her to cry out with pain. Typhoidal ulceration of the appendix was diagnosed. The degree of tenderness lead us to believe that the best course to pursue was the immediate removal of the appendix, to prevent the threatened perforation. Operation demonstrated the wisdom of the procedure. The appendix had a large typhoidal ulcer near its base, which had reached the serous coat of the organ which in all probability would have perforated in a very few hours.

The patient ran a prolonged typhoid course and made a complete recovery. The wound healed by first intention and in no way interfered with the necessary treatment of the case.

The differentiation between acute fulminating cholecystitis in a gall bladder abnormally low, acute rupture of the gall bladder, or acute appendicitis is practically impossible in the majority of cases. In either event if the patient is seen early in the disease operation should be instituted immediately.

The complications and sequelæ of this most disastrous and treacherous disease are well nigh endless, ranging from mild transitory troubles to dissolution.

As a matter of course peritonitis accompanies all cases of appendicitis where the inflammation has involved the serous coat, but short of this it does not assume the dangerous aspect that it does when it becomes circumscribed, diffuse or general, therefore the earlier the operation is done the less danger. In my experience operation in the presence of diffuse peritonitis if done within the first twenty-four to thirty-six hours

of the onset of the attack, and due to appendicitis, is followed by recovery. The three varieties of peritonitis, circumscribed, diffuse and general are all of importance. The difference between general and diffuse peritonitis is that one involves the whole peritoneum while the diffuse spreads widely in the lower abdomen. I believe that many cases of diffuse peritonitis are considered as general peritonitis.

Peritonitis is not always the destructive fatal process so commonly ascribed to it. It may be and frequently is the beneficial friend to the patient, forming a barrier between life and death's destructive agencies. The location of appendix inflammation; the plugging of perforations in the bowel, the persistent effort of the omentum (the abdominal policeman) to localize infections, all go to prove that inflammation of the peritoneum frequently serves good ends. The prognosis of peritonitis due to appendicitis depends upon the area infected, the character of the infection and whether or not early operation is instituted. Low grade infection of the entire peritoneum is more likely to result in recovery than a small area in which a high grade infection exists. Frequently a widely diffused peritonitis will be mistaken for a general infection of the whole cavity. Local peritonitis may be limited to the serous coat of the appendix, or involve all the structures in the right iliac fossa; which in the first instance may be likened to a straw fire that can be readily put out, but in the latter a conflagration involving surrounding buildings which will make it difficult and at times impossible to extinguish; any further extrusion I would call a diffuse peritonitis, the term implying a large but localized peritonitis.

There is always a time in every acute attack of appendicitis when the peritonitis is confined to the peritoneum of the appendix and contiguous peritoneal surfaces, and this is the time to remove the organ. The infection may be localized and confined to this area but there is no certainty about it. The greater the area involved, the greater the danger to life either directly by septic absorption or indirectly by adhesions, subsequent obstruction of the bowels, etc.

Appendicitis resulting in multiple abscess of the liver consequent upon a pylo-phlebitis I have observed a number of times and in every instance with a fatality. The majority of cases I have seen have followed dry gangrene of the appendix. I have met with but a few cases of solitary abscess of the liver the result of appendicitis; one recently seen did not develop until two months after recovery from the appendicular inflammation and necessitated resection of the ninth and tenth ribs posteriorly when the collection was readily exposed and drained. Many times I have seen the anterior border of the liver form a portion of the wall of an appendicular abscess. Sub-phrenic abscesses as well as abscesses in other portions of the peritoneal cavity (secondary collections) I have observed many times. A by no means uncommon site for a secondary abscess in cases where the appendix lies behind and to the outer side of the ascending colon or directly behind the colon is the space behind the hepatic flexure of the colon. When a secondary abscess is deeply seated and surrounded by coils of small intestine, its recognition may well nigh be impossible.

Lymphatic and hepatic infections complicating or following appendicitis have only recently been receiving the attention warranted by their frequency and importance. Monro (1) reports 39 cases which he divides into the following classes: Undoubted portal infection 15; sub-phrenic and portal infections 2; probable portal infection 1; abscess of the liver in which the avenue of infection could not be determined 2; subphrenic abscess 5; retroperitoneal lymphangitis 14.

Infection through the portal vein is usually manifested in the right lobe of the liver, although both lobes may be involved. The right lobe, however, is always more extensively involved owing to the anatomical arrangement of the branches of the portal vein. 1. Munro—Anals of Surgery, Vol. XXXVII, No. 5, May, 1905, p. 693.

The sub-phrenic space may become infected in one of four ways: 1st, through the intraperitoneal lymphatics; 2nd, through the retroperitoneal lymphatics; 3rd, by direct invasion of the pus along the posterior cellular spaces; 4th, through direct invasion within the peritoneal cavity, and indirectly by spreading along the colon to the anterior edge of the liver, and thence to the subphrenic space.

The frequency of these lymphatic infections in appendicitis is explained by the presence of lymphoid tissue in abundance in the appendix and walls of the cecum. Lymphatic infections are not limited to the liver but may involve the pancreas, spleen, pleural cavities, lungs, mediastinal spaces, etc. It is needless to say that this form of complication of appendicitis is attended by a very high mortality, probably the highest of any form of appendicitis. The liver infections are more dangerous than subphrenic, for the reason that the sub-phrenic abscess is more manifest and can therefore be diagnosed, opened and drained. Hepatic infections may take place shortly after the inflammation of the appendix sets in or may be delayed for weeks or months after all evidence of the originial appendicitis has

disappeared. The important diagnostic points to be remembered are the history of an attack of appendicitis, the painful, swollen, tender liver, the transitory and mild jaundice, constitutional symptoms, chills and fever, and rapid emaciation.

Munro in his exhaustive article on the subject says: "In conclusion I would make the following suggestions: First, lymphatic and hepatic infections are more common than we realize. Second, the two infections are frequently associated, and one type may be the source of origin of the other. Third, in certain cases of hepatic abscess, the source of infection, whether through the portal canals or through the lymphatics, cannot be determined either clinically or at operation. Fourth, the type of infection does not depend upon the gravity of the originating appendicitis. Fifth, sub-phrenic infections must not be isolated in a class by themselves, as they depend upon both lymphatic and hepatic infections, and vice versa. Sixth, hepatic infections are not uniformly distributed even when originating in the portal tract, the left lobe being solely affected at times. Seventh, the prognosis of lymphatic (including the subphrenic) infections is better than that of hepatic, but when the latter are secondary to lymphatic or direct mechanical invasion, the outlook is more favorable than in the true portal invasions. Eighth, the most important clue in making a diagnosis is the recognition of the causative appendicitis, and the elimination of this possible cause is necessary in dealing with obscure hepatic invasions in the presence of plasmodia, the Widal reaction, etc. Ninth, early recognition and removal of the inflamed appendix may abort a secondary infection of the type considered here, but the corollary does not necessarily follow. Tenth, the characteristic signs and symptoms are well established in typical cases, and should form a basis for diagnosis in an atypical case."

When the peritonitis at the time of the operation was wide-spread. was spreading, or even when a localized suppuration only was present, there may develop within the first week or ten days following the operation, one or more secondary or residual abscesses. In the presence of numerous adhesions it will often be beyond the power of the surgeon to tell when he has reached the last encysted collection of pus, and the best he can do is to break up all the adhesions he can find, and drain from every place where adhesions were present. If a localized suppuration alone was present, a residual abscess is liable to form only where the original abscess was not thoroughly evacuated and drained. Dr. Murphy in a recent article states that he now invariably attacks the appendiceal abscess from its intraperitoneal aspect, protecting the general cavity by gauze, as he fears that through simple evacuation of such an abscess by an incision made through the abdominal wall directly into its cavity, without breaking down its walls, subsequent unsuspected leakage backward into the general peritoneal cavity might occur, leading to the death of the patient. But while his contentions may be right in theory, it seems to me that they are not always best in practice, since there will always remain patients in whom the abscess is practically pointing through the abdominal wall.

While Dr. Murphy or a surgeon with equal experience may be able to do this successfully I would advise against the practice in the hands of the ordinary surgeon. All cases of extra-peritoneal suppurative appendicitis do not make smooth recoveries. I have recently had under my care at the German Hospital a case of suppurative appendicitis where the appendix was removed and drainage instituted by the extraperitoneal route. The wound granulated satisfactorily and the patient was discharged from the hospital, and returned to the dispensary to have the wound dressed. About two weeks subsequently a residual abscess formed for which the patient was again admitted to the hospital. A large fulminating abscess was pointing above the iliac spine. I opened this by direct incision, and evacuated a large quantity of offensive pus. For a couple of days the boy did well; but he then began to vomit, his fever became higher, his bowels were obstinately constipated, and it was evident that there was secondary peritoneal involvement. Recognizing that longer delay meant death I opened his abdomen in the hypogastric region, turned out his intestines, which I found adherent in innumerable places, and separated all the adhesions. There were seven different abscesses among the intestinal coils, one abscess being beneath the transverse meso-colon in the epigastric region. After thorough irrigation of the bowels and the peritoneal cavity, the intestines were returned to the abdomen, drainage was instituted by means of a glass tube to the pelvis and multiple wicks of gauze throughout the abdomen, corresponding with the points of suppuration, and the wound of operation was partly closed. The lad's fever subsided, his stomach became retentive, and although multiple fecal fistula developed, he is now, I am glad to say, well.

While this case may be taken as an argument in favor of Dr. Murphy's stand yet this is so rare in extra peritoneal abscess cases that the ground is not strong enough to take this stand; furthermore, that as this

patient recovered it is in keeping with the statement: There is nothing succeeds like success. The ordinary surgeon adopting Dr. Murphy's method I am sure would have more cases of post operative peritonitis and a higher mortality than would result from secondary abscess formation requiring so extensive an operative procedure as in the case I report.

Septic emboli loose in the circulation occur not infrequently in acute appendicitis and occasionally in the chronic form as well. The harm they do depends upon the point at which they are arrested. If in the lungs, the patient may die as a result of collapse, or if he survives he will most likely have a septic pneumonia. They give rise to septic endocarditis and pericarditis and to phlebitis. Of the venous involvement may be mentioned inflammation of the right iliac vein, of the right femoral vein, of the left femoral vein, of the mesenteric veins and of the portal vein.

Inflammation of the portal vein, however, with a consequent suppurative hepatitis, is not very infrequently seen. These inflammations are generally infectious, and give rise to infectious embolic processes, which are met with under the forms of hepatic abscess and suppurative pylephlebitis. Occasionally these conditions co-exist, as in the following case:

A. T., a white male, aged 22 years, a bartender by occupation, had a negative family history. His previous personal history was also negative; he had had only the ordinary diseases of childhood. During the eighteen months prior to first observation he had had three or four attacks of colic, attended by vomiting. There was no recollection of localized pain. These attacks usually subsided within a few days and he was able to return to his work.

On March 1st, 1885, he developed a sore throat, which was accompanied by stiffness of all his extremities and was followed by excruciating griping pains in the epigastrium, which were increased by deep inspiration. He had chills, fever and sweats at irregular intervals; headache and backache; his appetite was fair and his bowels were loose. When seen by his attending physician on March 15th, he presented the following symptoms: Temperature 103.4 F.; pulse-rate 96; hectic flush on the cheeks; extreme pain and tenderness and slight tympany in the epigastrium. His tongue was thickly coated, his heart and lungs were normal. His urine contained a trace of albumin and a few granular casts. Blood examination revealed the normal number of erythrocytes and leukocytes, and the normal percentage of hæmoglobin. Microscopically a few intracellular organisms, resembling the hæmatozoa of malaria, were found. During the succeeding night he had a severe chill and profound sweating. The following morning at 5 a. m. his temperature was 98 F., and his pulse-rate 80. A serous diarrhœa then set in. Quinine was administered without relief, and no change in his symptoms was noted until March 19th, when, with a morning temperature of 96.6 F., his pulse-rate was 104. His pulse was irregular, there was general abdominal distention, accompanied by marked tenderness and tympany, and a general peritonitis had evidently supervened. The diarrhœa continued, the pulse was rapid and irregular, and the patient grew weaker, and died April 4th. At necropsy, performed eight hours after death, there was detected a general peritonitis due to a ruptured abscess of the liver. The appendix was perforated and was embedded in a mass of necrotic adhesions. There was purulent inflammation of the portal vein extending into the liver substance In the upper part of the right lobe of the liver there were numerous embolic abscesses, one of which, situated near the surface, had ruptured beneath the diaphragm.

This case, which came under my observation at necropsy only, is reported: 1. To demonstrate the importance of excluding primary appendicular inflammation in the diagnosis of all intraabdominal affections, particulary when pain and tenderness are not referred to the right iliac fossa; and (2) to emphasize the value that should be attached to a history of previous attacks of colic with gastric irritation, one of the indications of early involvement of the appendix—from which, as an infectious focus other organs may subsequently become involved.

In advanced cases of suppurative or late appendicitis parotitis, single or bilateral, is an occasional complication, and often a very disagreeable and sometimes dangerous one. I have seen it occur with suppuration which has evacuated itself spontaneously into the mouth, and again where it was necessary to evacuate by incision. I have also seen the glands melt down under local treatment and become restored to their normal condition.

Intestinal obstruction following acute suppurative appendicitis occurs not infrequently and calls for prompt recognition and immediate operation. In my experience this complication occurs in about two per cent. of cases. Vomiting, pain and constipation coming on from three days to three weeks or later after the primary operation is suggestive of obstruction. If the symptoms persist after lavage, the abdomen should be reopened and the obstruction relieved.

Drugs not only do not do good but are harmful.

Faecal fistula is one of the most annoying sequelæ of acute appendicitis, and the only thing to be said in its favor is that the majority of them tend to heal spontaneously; this is not true of the fistulæ involving the small bowel. Simple fistulæ are much more liable to persist for indefinite periods, frequently remaining open until a silk or other unabsorbable ligature or foreign body is discharged. Faecal fistula high up in the small bowel should be operated early, so as to prevent starvation and the excoriating effect of the bowel contents on the surrounding skin.

Hernia follows in practically all drainage cases. To one familiar with the anatomy of the abdominal wall, and who is skillful in intestinal work the operation presents no serious difficulties. It is an operation requiring precision and patience, for all the adherent coils of bowel must be separated, the adherent portion of the omentum loosened and removed if need be, and the layers of the abdominal wall dissected out and united by suture each one separately. Asepsis is essential to success. The operation for the repair of a ventral hernia, however, is a much more serious matter than is operation in the early stages in acute appendicitis while the trouble is still confined to the appendix, the serous coat of the same and the peritoneum in immediate proximity thereto. Compare on the one hand the short delightful course of the elective operation, with its sure and safe return to health and happiness, to the poor unfortunate with an abscess, his abdomen open from groin to loin, protruding from it glass and rubber tubes and endless pieces of gauze, resembling the unfortunate but Godly St. Sebastian.

I say, compare the two conditions and then add to it the horrible possibilities of complications such as general or diffuse peritonitis with its fearful mortality and subsequent adhesion; intestinal obstruction; secondary abscess; fecal fistula; pulmonary embolism; phlebitis; pylophlebitis; metastatic abscess of the liver; sub-diaphragmatic abscess, with its tendency to break into a bronchus, discharging its foul and odorous contents through the unfortunate's mouth; abscess of the spleen; rupture into the urinary bladder.

I say gentlemen, that the conditions I am describing are not myths and visions of a fanciful mind, over zealous for the welfare of its fellow man, but every one of them and more have been the portion of the writer to deal with, and sometimes one cannot help feeling thankful that God in His infinite mercy takes home the sufferer, to a fairer clime where appendicitis and doctors do not exist.

A Successful Gastroenterostomy.

By Hubert A. Royster, A. B., M. D., Raleigh, N. C., Professor of Gynecology and Dean of the Faculty, Medical Department University of North Carolina; Gynecologist to Rex Hospital; Surgeon-in-Chief to St. Agnes Hospital; Surgeon to the Southern Railway.

The presentation of an isolated case-report is rarely justifiable. In this instance, however, one may be pardoned, owing to the increasing interest of both physician and surgeon in affections of the upper abdomen and to the instructive features of this particular case. We are told (and perhaps correctly) that the stomach has but two diseases—ulcer and cancer. And yet here is a condition to be detailed, in which neither of these lesions was found, showing clinically a set of symptoms similar to both of them. It is also noteworthy that gall-bladder disease was the prime cause of the gastric difficulty—an association found more and more frequent as these cases are continually brought to the operating table.

Anna C., age 29, a bare-back rider in a circus, was admitted to Rex Hospital in the latter part of October, 1905, with a probable diagnosis of cancer of the stomach. She vomited constantly, complained of great pain and was in a disordered mental state. Her immediate distress was due to an impaction of feces, which was promptly relieved by hyoscine and the alum enema. For the next ten days she was quite prostrated, and at times wildly delirious, even maniacal. During that period signs pointing to mischief in the right upper abdominal quadrant were first manifest and on November 10, 1905, an exploratory incision was made through the right rectus muscle. Very dense and extensive adhesions were encountered in the region of the liver and pylorus. Separating these as far as safety would allow, the gall-bladder was brought up and found to contain two large stones, which were easily removed. The patient's condition did not warrant further interference, so the gall-bladder was drained by means of a tube through the external wound and the recovery from the operation was all that could be desired.

While the surgical procedure instituted was regarded as necessarily incomplete, it was hoped that bile-tract drainage might secure permanent results. But, though the woman improved and parted with her infection signs, she began after a month to vomit again. Usually, there was pain in the stomach and expulsion of its contents about two hours after eating, showing dis-

tinctly that the pylorus was at fault. There was extreme dilatation of the stomach and a progressive loss of flesh and strength. The administration of drugs accomplished nothing.

On January 4, 1906, a gastroenterostomy was done, with the aid of Moynihan's forceps, using celluloid thread and catgut. A portion of jejunum at its origin was anastomosed to the stomach at the lowest point on its posterior wall. A careful search failed to reveal either a neoplasm or other organic change in the stomach, but the adhesions at the pyloric end were extremely numerous and tough—the evident factor in producing the gastric dilatation. The possibility of an overlooked or healed ulcer must be admitted.

From the moment she came out of the anesthetic this patient never vomited or had pain in her stomach. She took solid food on the fifth day and has been eating abundantly and comfortably ever since. About forty pounds of flesh have been added to her avoirdupois, with prospects of more to follow.

The lesson for us from such cases is that lesions of the upper abdomen seldom remain as single affections; where one organ is involved, the others are sooner or later sure to become diseased. The liver, bile ducts, stomach, duodenum and pancreas form a most interesting field of investigation for the doctor, whether at the bed-side or in the laboratory The early recognition of disease in these organs, not always waiting to be sure of the exact nature of the complaint, and the prompt surgical exploration, after all other measures have failed, should be objects for the study and attention of every practitioner of medicine. Many people now dying of "gastritis" and "acute indigestion" might then be saved.

Neuroses of Ovarian and Tubal Origin and their Surgical Treatment.

By J. F. Highsmith, M. D., Surgeon to Highsmith Hospital, Fayetteville, N. C.

The nerve supply of the genital organs has been described by some one as the pelvic brain, giving its connections and calling attention to the gastric, cardiac and other reflexes produced by irritation of these parts. Its existence is shown by the facts which the Gynecologist meets clinically, and by the fact of the removal of the offending organ, or correction of the sexual abnormality removes the neuroses in many cases. Certain rare cases arise in which no palpable pathological anatomic changes are perceptible, and still apparently gynecologic reflex neuroses exist. But these cases are rare in my experience. It is plain that the ovaries and tubes have quite an independent nerve supply, and also stand in intimate relation to definite regions. In other words, diseased ovaries and tubes have a predilection for certain nerves and nerve lesions.

Nervous reflexes occur especially at the periods of functional crises, puberty, pregnancy, menstruation and the menopause. The close relation between ovarian diseases, breast pains, pain in the iliac region and pressure sensation on top of the head, is often noted by the gynecologist. The origin of neuroses from the ovaries and tubes can sometimes be shown by the possibility of bringing on an attack by pressure over the ovaries when the neuroses has existed for sometime. In other cases the old train of symptoms may be aroused by some peripheral irritation, perhaps of a region not connected with the original local seat in the genitals, or may proceed after the original local cause has been removed.

For instance, Prof. Hega reports a case in which the patient after operation for pelvic disease was free from the pain for the first nine days, but on the tenth day complained of the return of all her old symptoms. Examination revealed the existence of a stitch abscess, the opening of which was followed by complete subsidence of the irritation. Adhesions of the tubes to other organs may subject them to irritation from either source, the genitals or the organ to which they are adherent. Thus adhesions to the intestines will cause irritation of the intestines, to aggravate the neuroses by causing peristalsis which drags upon the oviduct, or irritation of the oviduct may bring about abnormal peristaltic intestinal symptoms.

B. Robinson cites a case operated on by him and Dr. Lucy White, (American Gynecological and Obstetrical Journal, 1900, 17, page 201), who had been bedridden for years in consequence of a neuroses caused by a thin peritoneal band extending from the end of the amputated oviduct to the center of a sigmoid flexure. The severing of this thin peritoneal band enabled her to recover and to gain 30 pounds six months after the operation, with apparently perfect health. Of course other peripheral irritation may produce reflex nervous phenomena, and this must be distinguished from those having a genital origin. The irritation arising in the gastro-intestinal tracts from their local proximity is the most likely to lead one into error. Diseases of the rectum, or the colon sigmoid or appendix may bring about a train of local and general symptoms, or may be attributed to the genital system. Diseases of organs closely associated with the reproductive organs, as the breast thyroid and the salivary glands may have a similar effect. When a general neurotic

state has been established, and especially if psychic manifestations have supervened, the diagnosis must be guarded, for the condition may be referred to the pelvis without actual disease of the tubes and ovaries, thus leading to a wrong conclusion.

Dr. L. G. Hanley (Buffalo Medical Journal) reports the case of a woman, thirty years old, who had borne three children. For two years she had been treated for nervous prostration and was finally sent to an Institution for the Insane, suffering from severe melancholia with periods of excitement. Removal of large cystic ovaries resulted in complete restoration to mental health, He states the mental condition was dependent upon the pelvic disease in this case beyond any doubt.

W. H. Humston, (Annals of Gynecology, 12, page 245) reports a case of insanity and one of hystero-epilepsy which were cured by the removal of uterus and appendages. Another case of hysteria was cured, so far as the hysterical attacks were concerned, by removal of the ovaries.

Dr. A. T. Hobbs (American Journal of Obstetrics) reports 46 cases of ovarian diseases in insane patients; 28 complicated with other diseases of the pelvic organs in which insanity appeared to be due to ovarian disease; 20 out of 40 had never borne children; 19 recovered after operation, of whom 14 had been insane for less than two years; 10 improved. In the 12 uncomplicated cases, the percentage of the recovery was 58.

R. M. Bucke (Medical News, Aug. 11, 1900) found as the result of 200 operations on insane women, 4 died, 196 were restored to bodily health, 83 recovered from their insanity, 45 improved mentally, and in 68 the mental condition remained unimproved. In 63 operations in general surgery, there was only one recovery of mental health. Diseases of the ovaries and tubes seem to have the most influence upon the mental health, and removal of the ovaries produces a greater proportion of cures than any other operation.

P. Findley (American Journal of Obstetrics, Jan. 1904) in review of 39 uncomplicated cases of cystic degeneration of the ovary, found hysteria in three cases, and neurasthenia in all. Headache was complained of in 15 cases. The author concludes that the general nervous phenomena was due to the general discomfort, and with such condition only local discomfort should not call for surgical interferences, or for any consideration of the ovaries. He believes in the resection, or *even* the complete removal, of the uncomplicated cystic ovaries, but *only* where local discomfort, which is the direct result of a lesion, justifies the removal of a part, or whole of the ovary.

Had I time I could give abstracts from many operators, with their results, where the ovaries and tubes had been removed entirely, and where plastic operations had been performed with their respective results.

Suffice it to say I think we are bound to admit that surgery has accomplished more than all other remedies in the restoration of health where the ovaries and tubes were found diseased and the cause of the trouble. Just when surgery should begin and just where it should draw its lines, by this I mean whether to be radical or conservative in the removal of the tubes and ovaries, *is a question*, one which I hope may be freely discussed by those present who have had more experience than I in the management of this class of work. From a practical standpoint in my experience as a Gynecologist, I have seen great good follow in almost all, if not all, of my cases of reflex neuroses, shown to be dependent upon ovarian and tubal diseases. I have in most cases been able to diagnose by by-manual examination, the diseased tubes and ovaries before the incision was made. My choice of route has been through the abdomen. I have preferred this for the simple reason that I felt I was in a better position to do thorough work than if I had gone the vaginal route. As to whether I was radical, that is removed completely the ovaries and tubes if found to be cystic with slight healthy portions, has depended to a great extent on the age of my patient. In many cases I have opened up young girls and found the ovaries cystic masses with very little healthy ovarian tissue. These cases I have done the plastic operation, that is removed the cystic material and left just a little ovarian tissue, whipping it over with catgut, preferring this to a total extirpation, as that would bring the climacteric with all the train of nervous symptoms. Where my patient was between 35 and 45, finding the ovaries badly diseased, have removed them complete, and have had a few cases return extremely nervous, but after six or twelve months they have steadily improved, gaining in weight and strength. The cases which have been referred to me have been those that had gone to the utmost limit of suffering before they would consent to an operation. In looking over my records, I find 200 cases of ovariotomy of special interest occurring in my practice, and so far as I am able to learn from these cases, all have been benefited and most of them cured. Just a few which have been of special interest to me I herewith cite:

January, 1902.—Miss G., age 20; well developed, plethoric, and to all external

appearances perfectly healthy, comes of a strong, healthy family, no hereditary diseases, no neuroses. Her mother stated that since her periods occurred at the age of 12, she would have nervous paroxysms. First it was more of a cataleptic state, had gradually grown worse until it looked to be of an epileptic character. She had gone to that extent that she would be suddenly seized; quicker than an electric current she would be perfectly rigid. Her periods were regular and normal in every respect, but this nervous condition grew worse at that time. She had taken all kinds of nervines, bromides, etc., with no help. I advised an exploratory incision, for diagnostic purposes, thinking that this neuroses might be due to ovarian disease, and on examining the ovaries and tubes I found the former to be thoroughly cystic. I did a double ovariotomy. Her periods of course disappeared. It has been now four years since the operation. She has been relieved, never having one of the spasmodic nervous spells, and at the present is in perfect health in every respect.

Miss B.; school girl, 19 years old. While in College began to suffer with a severe pain in her left leg. She became greatly depressed, her eyes gave way, she had to consult an Oculist, her health became so impaired she had to be taken away from school, and at times it was feared by her family that she would become demented. When she came to me for an examination, (April, 1900) I felt an ovary on the right side which was cystic and enlarged three times its normal size. On opening the abdomen I found a hydrosalpinx of the left tube, and the ovary of the left side in fair condition, but with a spicula of bony-like substance calcareous in character, about one-fourth of an inch in length, and sharp as a needle, piercing it. This patient suffered with most extreme pain in the left leg, and at times was almost unendurable. I am sure that great pain was due to the pricking of the hydrocele from this spicula in the ovary. A plastic operation was done on the left ovary and the hard substance removed. The right ovary was found to be a cystic mass which I removed, also removing the left hydrosalpinx. The patient made an uninterrupted recovery, all pains disappeared, her eyesight returned, she did away with her glasses, and since has seemed perfectly well.

Miss O.; age 20, consulted me (May, 1901) being extremely nervous, eyesight bad, headache, had already consulted an Oculist, and was wearing glasses. Upon examination I found that she was wearing a pessary for supposed posterior displacement. Found on examination that she had no displacement. She would have fainting spells. While she was an ambitious young girl, she took no interest in life and kept herself away from her friends. On examination through an incision I found that she had a hydrosalpinx of the right tube an inch in diameter, and about four inches long. This I removed complete. She made an uninterrupted recovery; her eyesight returned, she took hold of life anew and was entirely restored to health.

Mrs. J.; married when she was 16 years old, sterile. Had suffered since the first time her periods ever came on. On Nov. 1902, at the age of 30, she consulted me and in brief gave the following history: Suffered greatly with her throat. Had consulted Throat Specialists far and near for a choking sensation, which at times became so severe she could hardly breathe. While she liked and desired to attend church worship, she had not been inside of a church for 10 years, on account of disturbing the congregation by fainting. By by-manual examination, I found a mass the size of my fist posterior to the uterus. Had much the feeling of a fibroid. She had had great trouble in getting her bowels to move. On opening the abdomen, and lifting the uterus up, I found the signs of an old exudate which had been thrown out, and the right ovary prolapsed deep in Douglas's cul de sac, and a broken down mass the consistency of pitch, as dark as tar, the color of molasses. I took this broken down mass away, and washed out the cavity. The left ovary, while it was not in good shape, she being so anxious for children, I left a portion of it, hoping that it would improve, and at any rate prevent the premature menopause. This patient made a perfect recovery, has been well since, has no throat trouble, no nervous turns, is a teacher in the Sunday schools, and thus bespeaks the success of the operation.

Mrs. B.; age 35, mother of one child, 6 years old, was referred to me by her family physician, June, 1903. Anemic, nervous, with every organ in her body in a depressed condition, her assimilation greatly impaired, her heart action greatly increased, she could not ascend stairs or do any manual labor without getting out of breath. Her periods were irregular, but at times profuse. She consented to an operation. The abdomen was opened, ovaries examined and found to be twice their natural size, cystic in character. The double ovariotomy was performed. She made an uninterrupted recovery, and since then has grown stout, gaining 25 pounds in flesh; does her own household work, and is enjoying the best of health.

Would that I had time to enumerate the many other cases which have been of great

interest to me. In conclusion would say that ovarian and tubal diseases give rise to reflex disturbances, showing this in many ways, and while I do not believe in removing healthy ovaries or unnecessarily operating, I do believe that in the greater majority of neurotic conditions dependent upon tubal and ovarian diseases, surgery carefully applied, is the remedy which stands first, and many times patients are allowed to go on and on shunning operative interferences until the last hope, while if the case had been taken in time before the great neurotic centers had become so thoroughly involved, even greater results could have been promised and given to our patients. Many times I have been astonished in the operating room, could not realize how the patient lived and worked with the conditions that existed. But if the condition is once found, like all other truths in nature, it becomes simple and we wonder why the case had not been relieved before.

Prevention of Malarial and Yellow Fevers.

By D. L. Peeples, Navasota, Texas.

There are some questions of moment, or unsolved problems concerning these fevers. For instance, during the period of lactation, the galactoblast is found in the milk, while the neutrophile granules, or the multinucleated leucocytes, are not in the red blood cells. However, at present it is doubtful whether an infant would absorb from a perfectly normal nipple hæmatoporphyrnuria, though we understand that hyperinosis may transmit pneumonia. Pathogenic micro-organisms are capable of infecting a nursing child; to illustrate: the streptococci in puerpural fevers do infect, so also do the typhoid bacilli; the tubercle bacilli have not yet definitely been observed in human milk, but certainly so in cow's, as also the micrococcus prodigiosesus as well as the bacillus pyocyaneus, etc. It is questionable whether a nursing infant can be infected purely by this method, the mother suffering with malarial hæmaturia, hæmatimuria or hæmoglobinuria (commonly known as Black Jaundice), the comatosed variety being almost absolutely fatal. The same doubt may be entertained pertaining to yellow fever during lactation. However, exercising the best precautionary measures, I would advise the removal of the child from the breast temporarily, but not from the premises, provided the building was properly screened and disinfected. A few years ago this city was commonly termed a "death hole." Touching upon Pernicious Malarial Fever, which was so prevalent, and the cause of most of the deaths here, I can frankly assert that it has been practically relegated to the "back shelf," or confined to the bottoms proper, and even there, now almost obsolete. The laity in this section readily recognize the gravity of the disease, and term it "congestion." It would be quite a matter of interest to deal with this type above, as I have never seen any text-book consider this form of fever as it existed here. I can attest to the fact that, on numerous occasions, patients, apparently well, would retire from their business avocations, and, within from a few hours to a few days, succumb to death. It is an observable fact that the mortality rate is greater among the robust than in other classes. Mild. Chlor. Mer. may be administered from one to nine grains, castor oil from one to two ounces. Oil teglii from one to five drops prepared in glycerine, and, provided the patient may retain any or all, will result futile. The stomach pump may be resorted to for the purpose of eliminating bile, etc. All forms and characters of enimata being introduced per rectum high up having ingress and egress with one or two tubes in quantities from oi to cong. ii, resulting inappreciably. Have administered Quinine Bi. Mur. grs. xxx every three hours hypodermically with fatal results, have administered it in small doses grs. i to grs. iii and further apart with similar results. Normal saline solution subcutaneously in same way with corresponding consequences. Have lost as many as five cases in one week from this most fatal disease, successively. The entire centres of neurological origin that preside over peristalsis are paralyzed, except the stomach, gall bladder, ductus communis choledochus, the latter being extremely active, these are reversed in their activity. The muscular and mental powers are preserved to the last, (except as alluded to just previously). No pain is realized, and the kidneys are underanged, except increased secretions, so with the parosity of the epidermis. However, I will not attempt here to detail the symptoms, nor treatment of any of the types of malarial fevers. But suggest the present method of prophylaxsis, *death to the mosquito*. Perfectly screen all houses, then disinfect the entire buildings of the community with sulphur, about two pounds to each 100 cubic feet, or a smug of one pound of sulphur, one-half pound of powdered tobacco, to be burned with a sufficiency of alcohol or solidified Formaldehyde. All doors, windows or openings of any character must be closed, and continued from four to six hours with Formaldehyde much less, remembering the bad effects upon all metallic substances by sulphur such can be removed. Rather than purchasing caskets, perfect all surface drainage, permit no standing water in the neighborhood, keep

stock away from the edges of running water. Do not permit drivers to drive their teams in ditches to shrink their tires in summer, which they frequently do leaving eddy water upon the entrance and edges from any small stream. All puddles of water should be either well screened or coated with kerosene, or the so-called Beaumont oil, the former should be applied every week, the latter every two weeks, unless it rains, then oftener; petroleum is found in vast quantities over great areas in Texas. Every vessel, bottle or any part of one capable of holding water, all discarded tin cans, etc., should be carted away and buried, or well screened, the former being preferable. No gutter should be allowed to sag, but should be coated with oil after each rain or at least every seven days. Knot holes in trees capable of holding water should be well drained, or such trees felled and consumed by fire. In the event ants are bad and for the protection of dining table and safes laden with proteids place their feet in cans containing oil, not water. Some leaves catch rain water and become the birth places of mosquitoes; these should be piled and burned. All cisterns and wells should be well oiled and screened, and if the latter is impracticable they should be stocked with minnows, as well as stock tanks. The latter should be protected by a good fence, except when stock are allowed ingress and egress, which entrance should be cemented well into the water thus preventing the imprint of their feet into the water's edge. This applies to the South, especially the Gulf States, also more particularly to the torrid zone, during spring, summer and autumn, and to the latter all the year round. Even some old locks, a thimble, etc., may become the breeding places of mosquitoes. It would be too arduous for me to enter into every detail of this subject here, or even into my public work for the city during the summer and a part of the autumn of 1905.

I have humbly presented you with a few ideas or suggestions, that the reader may continue to develop greater thought. The writer well remembers when this city contained eighteen active practitioners, all maintaining a lucrative practice, while at present two can do the work without hardships. Others located here will be compelled to seek new locations, since the adoption of screening and oiling every place that contains water for more than five or six days. It may be amusing to sketch from Pepper's System of Medicine, prepared by Bemis, on Yellow Fever: "Warm, damp weather is most prominent in yellow fever epidemics, the three cases in which he was able to fix the date of inoculation of the disease were 72, 83 and 101 hours of each stage of incubation. But the portability of the disease by fomites, textile fabrics, is at present ridiculous, though he was sincere at the time in his statements. The sincerity of the story of the lock of hair, reported by Dr. Shannon, of Ocean Springs, Miss., was also sincere in his opinion. This same case will no doubt reveal or solve the problem by thinking physicians without further explanation. Had any person swallowed the entire lock of hair, no effects would have resulted as far as yellow fever is concerned.

All railways and street cars should be perfectly screened and commerce not impeded, passenger traffic could continue from infected points with slight interference, and not convey the disease. Not infrequently railroads are fearfully hampered. The day will soon arrive in midsummer when yellow fever will be a thing of the past. We learn as we advance.

Diagnosis of Appendicitis.*

By F. L. Potts, Spartanburg, S. C.

Mr. President and Gentlemen of the Tri-State Medical Association:

I have chosen for my subject the differential diagnosis of appendicitis with the report of one case of mistaken diagnosis.

Inflammation of the appendix is preeminently the disease attended with pain and tenderness in the right iliac fossa.

It is generally observed that persons attacked with appendicitis is an adolescent or an adult who enjoys good health but has been afflicted with various functional digestive troubles. Most usually he is seized with a general abdominal pain which soon localizes itself in the right iliac fossa; from this time on several varieties of inflammation may follow, each with a distinctive result, such as acute appendicitis, acute suppurative appendicitis, acute gangrenous appendicitis, (partial or complete) and chronic appendicitis. These, of course, can be sub-divided into classes almost innumerable and quite as useless as far as diagnosis and treatment are concerned, the symptoms only differing in degree and extent. In any acute involvement of the appendix the symptoms of pain, vomiting, abdominal tenderness, fever, muscular tension of the abdominal wall, with or without constipation or diarrhea, are present to a variable extent, depending on the intensity of the infection and the course of the disease. The onset of the attack is, in the majority of cases, sudden. This sudden development of the primary symptoms is so characteristic

*Read before Tri-State Association Carolinas and Virginia.

that in diagnosis ordinarily those diseases having a sudden onset are considered. The pain is one of the most important of the cardinal symptoms. It is acute and lancinating and first referred to the epigrastic or peri-umbilical region. In a few hours it localizes itself in the right iliac fossa. In only one-fourth of the cases is the pain, at the commencement of the attack referred to the right iliac fossa. Vomiting is a comparatively frequent symptom, it follows the onset of pain and is usually accompanied with nausea. It is very rare for it to preceed the pain. It is looked upon as a reflex phenomena and not dependent upon any disturbances of digestion. Abdominal tenderness is present in all cases and is present within six hours of the onset. It corresponds very accurately to the location of the appendix in a general way, and when localized in a small area is called point tenderness, (McBurney).

In the very commencement of the attack or where a more or less diffuse tenderness exists in the right iliac fossa with a single point of exquisite tenderness on the external border of the right rectus muscle, in a line from the umbilicus to the anterior superior spine of the ilium, this symptom is one of importance. In the absence of other symptoms to corroborate it too much importance must not be placed upon this symptom. In other respects the tenderness corresponds quite accurately to the location of the process. Fever is perhaps the most unreliable of all symptoms, it may or may not be present. The pulse also may be little affected, depending on the degree of infection or extent of peritonitis. If peritonitis be present to any extent, muscular tension in the abdominal wall is marked. In chronic appendicitis it is generally not present. In acute cases of limited peritonitis it is generally present and confined to the right rectus muscle. A tumor is not generally present in the chronic cases; in the acute cases it makes its appearance at the end of the first to the second or sixth day. Believing that the cardinal symptoms of appendicitis are pain, tenderness and muscular rigidity, regardless of the variety of inflammation, and always present to a greater or lesser degree, it seems quite useless to consider the different processes individually.

Chiefly on account of the pain and tenderness, acute appendicitis may be confounded with a number of diseases, prominent among which are colic, bilious colic, renal colic, acute cholicystitis, perforation of the gall-bladder, typhoid fever, ulceration of the lower part of the ilium, obstruction of the bowel, abscess in or around the kidney, floating kidney, inflammation of the right ovary, extra uterine pregnancy, pelvic peritonitis, abscess in the abdominal wall, abscess of the liver, and distension of the caecum. The sudden pain, the acute indigestion, the nausea and vomiting may cause appendicitis, at its beginning, to be mistaken for colic, especially for billious colic, but the localization of the pain and particularly the tenderness in the right iliac fossa are very different. On the other hand, jaundice, that attends or follows billious colic, is not a symptom of appendicitis, and the pain does not radiate to the shoulder and scapula. The same localization of tenderness is of value in distinguishing renal colic, where the tenderness, if it exists at all, is most marked over pouparts ligament, moreover rectal and vesical tenesmus and retraction of the testicle, common in renal colic, are very rare in appendicitis.

Pain and tenderness in the right iliac fossa may be the cause of typhoid fever being confounded with appendicitis, but neither pain nor tenderness is great in typhoid fever, then the characteristic temperature record, the nervous symptoms, the diarrhea, the eruption, furnish striking points of difference. Ulceration of the lower part of the ilium produces pain and tenderness in the iliac region, but combined, as the ulceration generally is, with tubercular disease, the history of the case gives a clue to the nature of the malady.

Another difficult diagnosis is at times that regarding obstruction of the bowels, the more difficult because appendicitis may become a cause of intestinal obstruction. In both there is pain, in both constipation, in both vomiting, but the pain in obstruction is not localized or attended with such a significant seat of tenderness as McBurney's point; the constipation in appendicitis is not so absolute, and flatus passes. The vomiting in this disease occurs early then generally stops; late vomiting is the rule in obstruction and it becomes fecal. Acute intersusception has a different history, and makes its appearance suddenly with such peculiar signs that although it may likewise occasion a tumor in the right iliac region, it can be generally distinguished from appendicitis. Yet, where the latter leads to intestinal obstruction, the diagnosis is not always obvious.

As regards abscess in or around the kidney, the situation of the swelling is not exactly in the ilio caecal region, or at all events it is not confined to this region, and the urine contains such ingredients as puss, or blood, or heavy deposits of urates or phosphates. Moreover, there is no intestinal disturbance or marked local tenderness, such as we find in appendicitis.

In floating kidney the mobility of the organ, the slight tenderness, the dyspeptic

symptoms and the throbbing of the abdominal aorta are very significant. An inflammation of the right ovary gives rise to pain and tenderness in the right iliac fossa and to fever, but it is associated with disturbances of the uterine functions, with characteristic ovarian pain, and occasions no perceptible swelling.

Extra uterine pregnancy may be mistaken for acute appendicitis in consequence of sudden rupture of the sac, and I may add right here that this mistake has been made by myself in consultation before the rupture. But the previous history, the great prostration, the excessive thirst, and a pelvic examination will, in the majority of cases, explain the true meaning of the symptoms. Ovarian abscess, pyosalpynx, fibroid tumors, a varicose condition of the veins of the broad ligament and painful menstruation may also be mistaken for appendicitis, but as Dr. Deaver, in an admirable paper, based on extraordinarily large experience, shows, none has the exact combination of signs found in appendicitis.

Generally in diseases of the gall-bladder the seat of pain and tenderness is over it, and not in the right iliac fossa, as in appendicitis. But there are exceptions in both affections, rendering the diagnosis very difficult, it may be, impossible. The swelling of a distended gall-bladder may be felt very low down, and on the other hand appendicitis of the upper part may have its local signs in the neighborhood of the gall-bladder. Rigidity of the rectus muscle and pain are common to gall-bladder diseases and to appendicitis. The pain of acute cholicystitis is, however, more violent and so it is as a rule, in perforation of the gall-bladder than in perforated appendicitis, still, how deceptive symptoms may be is proved by the published cases of surgeons like Fowler and Richardson.

An abscess in the abdominal walls furnishes many signs of abscesses around the appendix. The most trustworthy points of distinction are, first, the local evidence of inflammation in wall abscess, second, it moves with abdominal wall and is unassociated with intestinal symptoms. In psoas abscess we have the association with caries of the vertebra, rigidity or an excervation of the spine, dorsal pain and tenderness.

It is sometimes difficult to distinguish between appendicitis, especially in its chronic form, and abscess of the liver; the more difficult because, as I know by experience, they may co-exist, the hepatic abscess being most likely consequent to the appendicitis. Another fact that makes the diagnosis difficult is that the pain and tenderness in appendicitis do not always exist in the right iliac fossa, but may be found at various parts of the abdomen, the abscess following appendicitis may extend high up towards the liver; in these difficult instances, the history of the case, as well as the study of the sequence in which the phenomena appeared, becomes of the greatest value. A distention of the coecum may be mistaken for chronic appendicitis. It gives rise to fullness in the right iliac fossa, and to pain, often of a colicky character, but not associated with inflammation, tenderness or fever. Purgatives too clear out the fæces which accumulate from want of power of the bowel to propel them, and the dullness on percussion vanishes after free evacuation.

Dr. Leonard has very kindly furnished us with the history of the case that we will report.

Susie D., colored, aged 32 years. Past history; has had two children, youngest about six years of age. Since birth of last child has had two miscarriages, history of gonorrhoea negative, menstruation irregular for past three years. For last six years has suffered repeated attacks of colic, followed by nausea and vomiting and was told by one of Spartanburg's prominent physicians (now deceased) that she had appendicitis. Has been troubled for years with constipation.

Present Condition.—In February 1905 was suddenly seized with acute pain in right side, followed by nausea and vomiting, stomach would not retain anything; when called patient had been sick for three days, constipated, pain in right iliac region, tongue coated, pulse 80. Gave calomel and soda of each gr. 5, followed in six hours by saline laxative 2 drms. every two hours until bowels moved freely. Heard nothing from patient until one month later, when I received a hurried call On my arrival found patient suffering intense pain in right iliac fossa, pulse accelerated, but no temperature. Hypodermic of morphine given, which was repeated in 30 minutes, calomel and soda tablets ordered every half hour, still on second day no bowel movement had been secured. Abdomen so tender that I could not palpate, but on inspection could easily make out tumor-like mass in right iliac region; bowels having not yet moved ordered castor oil, which moved bowels freely in two hours. An operation was advised, believing it her only chance, for my diagnosis, gentlemen, from the past history, the present symptoms and the neglect of making a vaginal examination, was appendicular abscess. I called Dr. Potts in consultation and we found a pulse of 110, temperature normal, pain constant, mass in right side increased in size and a bad expression. We advised immediate operation, which was accordingly done two hours

later.

Gentlemen, this is the history of the case since patient first came under Dr. Leonard's care.

The usual incision was made, parallel with the outer border of the right rectus muscle and on opening the peritoneal cavity clot after clot escaped until we reached the source of a free flow of blood: free, it was more than free, it was terrifying. We at once discovered a rent through which a fetal head was protruding. The tube was at once ligated at its uterine attachment then distally and the mass removed, wound closed in center, gauze drain introduced above and below, patient almost dead from loss of blood. Saline transfusions given at regular intervals, which relieved her symptoms of acute anaemia and shock about the third day, from which time on she made an uneventful recovery.

Some Observations with the Oudin Current From a Static Machine.

By Dr. Frederic de Kraft.

Before entering on the consideration of this form of high frequency current, let me describe the apparatus I employ. For feeding the large Leyden jars in the Resonator I employ either a Static Machine of sixteen or one of twenty revolving plates and sixteen or twenty stationary plates, the 16-plate machine having disc 32 in. in diameter and the 20-plate machine having discs 34 in. in diameter. The 16-plate machine is run by a half horse power motor and the 20 plate machine by a one horse power motor.

The current from the outer coating of the Leyden jars is passed into the primary spiral of stout copper wire of seventeen turns; inside of this is a spiral of insulated copper wire of a great number of turns, which later forms the secondary, or Tesla Coil. This in turn is connected with a solenoid of many turns of rather coarse wire which forms the type of Oudin current of which I am about to speak. There is also another solenoid provided, consisting of very fine wire which gives us a softer Oudin current for use in the cavities of the body where a soft non-irritating current is needed. The apparatus here described is made by the Van Houten & Ten Broeck Company.

If we run the 20-plate machine at top speed, place the patient in a large easy chair on the insulating platform, and connect him by means of a piece of tin foil 6x12 in. in size, and a wire to the top of the Oudin resonator, we are condensing a current in our patient of about 250 milliamperes at a very high voltage, estimated to be in millions.

The end of the Tesla Coil, not connected to the Oudin resonator, should be grounded or connected to the wooden part of the platform. This method we term auto-condensation of the Oudin current. While our patient is charged with this high frequency current of very high potential, we can draw a spark from his body varying from 2 to 6 in. in length.

A vacuum tube will light up faintly at a distance of three feet from the patient and, if held in our hand against his body, will glow with a violet color and will feel warm. Again, if we darken the room while our patient is thus connected, we can move this tube about in the room, the tube being simply held in our hand without any metallic connection with the apparatus or patient, and it will light up in any part of the room, thus showing the great diffusibility of this high frequency high potential current.

This form of auto-condensation I have found useful in neurasthenia, hysteria and chorea, as well as in whooping cough.

Let us now consider what seems to be the most useful method of using the Oudin current—auto-conduction. The technique is as follows: The one side of the Tesla is grounded. A plate of tin foil, about 8x12 in., is then placed against the patient's body opposite the part to be treated and this plate is also grounded. The electrode, be it a glass vacuum tube or a metal plate, is connected with the resonator by wire and placed against the part to be treated. The current thus passes from the Oudin resonator (the higher potential), through the patient to the metal plate on the patient's back and thence to the earth; from there to the grounded end of the Tesla.

To show that this current really passes directly *through* the patient's body, and not over the surface, let us make the following experiment: The plate applied to the patient's back is placed over the vertebra prominence and grounded; the other plate is placed over the abdomen and connected with the resonator. Put the machine in most rapid action. Have the spark gap at the metal balls, (which are connected to the inner coating of the Leyden jars) 2½ in. long. We thus have the most powerful current the machine can generate, and yet if the contact and grounding be perfect we cannot draw any current in the form of even a tiny spark from the patient's body though our milliampere meter may register 100 or more milliamperes, showing conclusively that the current must go through in a perfectly straight line. If doubtful yet, let us lift the chain which grounds the plate on the patient's back, and we will see clonic and tonic contractions in the muscles of the arms and legs of the patient at the moment

when a pure white spark is passing between the end of the chain and the metal grounding. These contractions are the more pronounced if this spark is 2 or 3 in. long. This shows that the current is passing through the motor tracts of the spinal cord and is doing work in the deepest tissues.

Again, let us leave the grounded metal plate on the patient's back; connect a glass vacuum surface electrode to the resonator and place it against the patient's chest, and then we will see a stream of violet colored rays travelling through the vacuum at a tremendous speed. The glass will feel warm, even hot, to the patient, and the metal collar of the electrode, also the glass nearest it, will be hot in a minute. We have here a stream of electrons travelling through the patient's chest at a rate of speed so great as to be beyond human conception. These electrons can be made to carry along various remedies into the patient's body.

The physiological effects of currents of high frequency and high potential may be summed up as follows: Increase in bodily temperature and output of calorics through increased oxidation of the blood and tissues as well as through increased chemical activities; increase in excretion of C O_2; increased elimination of sweat and urinary solids.

This method of auto-conduction is particularly useful in tuberculosis as shown in the following cases:

M. D., aet. 40, occupation, paver, had been sick about one year. When he came under treatment he had coughed for a year and a half. In September, 1903, he was seized with vomiting and coughing of blood which continued for a week or more at intervals. He had high fever and was getting rapidly worse and his means becoming exhausted he went to St. Joseph's Home for Consumptives. While here he continued to get rapidly weaker. As he felt that death was near he was brought home. Some friends helped him financially. He was brought to my office for high frequency treatment in June, 1904. His temperature was 103; his weight 110 lbs. His normal weight had been 165 lbs. He had a number of large cavities in the left lung. A glass vacuum electrode was held against his bare skin over the chest and gradually moved about over the whole front and back of chest. The warmth of the electrode was grateful to him. After a fifteen-minute application he felt warm and perspired freely. He returned after three days for another treatment saying the current had eased his chest pains, loosened his cough and helped him to eat again with some relish. From this time on he came regularly every other day for his high frequency. He was given very little medicine and was told to sit in the sunlight all he could. In a month his weight increased to 135 lbs. and he returned to his work. He worked all summer and fall, gaining steadily in weight until in October he weighed 160 lbs. By December he weighed 175 lbs. and his sputum contained very few tubercule bacilli.

In February he contracted a cold and was taken with a violent chill. Active inflammation of the right lung then set in and he died in March.

In this case the high frequency current certainly improved the man's physical condition and helped him to provide for his wife and children for at least six months longer than he could otherwise have done.

W. K., aet. 7 years. Family history; two sisters, one brother on mother's side and one brother on father's side died of tuberculosis. Previous history; measles when three years old, chicken pox in January, 1904, whooping cough in January, 1905, and ever since had been coughing and had had fever which increased during the three weeks preceding his examination.

June 13, 1905. Physical examination. Temperature, 103½.

Great emaciation; patches of gray hair on his head.

Large hard abdomen. Weight, in a heavy winter suit and with overcoat, 38½ lbs; various rales all over left lung, some over right lung; slight dullness. The boy had been treated by various physicians and the diagnosis of tuberculosis had been made. I advised high frequency high potential currents as worthy at least a trial. His father wishing to talk it over with the boy's mother waited until June 15 when his mother brought the boy for treatment, the temperature then being 103½ at 7 p. m.

The high frequency effluve was applied and at the end of ten minutes the boy was in a profuse perspiration and his temperature had dropped to 100. He went home, perspired and slept all night. In the morning, for the first time in months, he expressed a desire for his breakfast. In the afternoon played again with the other children, which he had not done for a long time previous. When he returned on June 17 his fever was gone.

He continued to receive high frequency till August 2, when he was discharged as cured. He had not coughed in weeks. His weight was 45½ lbs. in the lightest little summer suit. His large hard abdomen had disappeared and he is well today.

L. R., aet. 35; good family history; came under treatment in October, 1904; had coughed for some weeks and had been treated by various physicians, among them a throat specialist, without result. Her even-

ing temperature was 102 to 103. She was much emaciated. Had rales of various kinds over left apex, dullness on percussion, tubercule bacilli. Her weight was 118 lbs.

High frequency high potential currents were applied twice weekly at first, with some resulting improvement; then every other day for a time. In January, 1905, every day; by February, 1905, her cough, fever and tubercule bacilli had disappeared; her weight was 142 lbs., and she ceased treatment and has remained well since.

I might cite other cases, but these will suffice. In alcoholic cases of tuberculosis this treatment failed entirely. High frequency, high potential currents have become a classical treatment in fissures of the anus as the following case will show:

J. W. aet 34, good habits, good family history, had been troubled with pain in his rectum since May, 1905. His brother, a physician, had tried the ordinary remedies without result, and brought him to me for high frequency, high potential treatment on October 8, 1905, when we located a rather deep, angry-looking ulcer at the posterior part of the anus. 24 applications with a glass vacuum electrode in the rectum effected a cure.

Warts in great numbers have been removed by me successfully with the high frequency spark.

In the various forms of rheumatism, the high frequency, high potential spray and spark have helped me much in achieving very satisfactory results.

Ida C., aet 18; family history, one maternal aunt died of sarcoma of lower jaw bone, one uncle on mother's side died of tuberculosis. Previous history. Had always been well till September, 1905, when she contracted tonsilitis accompanied by chills and high fever. This was followed by enlargement of cervical lymphatics. Status present: Jan. 15, 1906, she is a well developed girl, slightly anaemic, otherwise well nourished and presents no other evidence of ill health except an enlargement of three cervical lymphatic glands, the mass extending from sternum to mastoid on the left side, each swelling being the size of a goose egg.

High frequency high potential currents were applied by means of a glass vacuum electrode seven times during a period of two weeks, each application occupying ten minutes. Result, all signs of swelling have disappeared at the end of two weeks. Pallor of cheeks has markedly diminished.

148 W. 70th St., New York.

Pregnancy Complicated by Fibroid.

Winter (Monat. f. Geburts. und Gynak.) gives the results of the studies in 23 cases of pregnancy complicated by fibroids. He discusses the effect fibroids may have upon pregnancy, labor, and the puerperium, and the manner in which the fibroids may be affected by pregnancy.

Five cases progressed without any disturbance; 18 had pain of some kind, generally a sense of weight, bearing down, or actual acute pain. The pain was due to various causes, such as contractions of the uterus, circumscribed peritonitis, or secondary changes in the fibroid. Hemorrhage occurred five times, four times in cases of abortion, once in a submucous fibroid. One death occurred from pneumonia after an exploratory laparotomy and 1 from aneurysm. In 14 cases treated expectantly 9 ended naturally, 3 aborted, and in 2 labor came on prematurely. Labor occurred spontaneously in 9 cases, forceps was used once, and in 1 case a manual extraction of the placenta was necessary. The puerperium was afebrile in 9 cases; phlebitis and thrombosis of the saphenous vein occurred once, and 1 case died of sepsis. His conclusion is that when myomata are present there is generally some sort of a disturbance. It is, however, seldom serious and usually ceases spontaneously. Labor occurs normally if the fibroid be not so situated as to impose an insuperable obstacle to its progress; the third stage gives no trouble, as a rule, and the puerperium is aseptic so long as the usual antiseptic precautions are observed.

With regard to the influence of the pregnancy upon the fibroid, only the cases operated upon were taken into consideration. Of the 5 specimens removed by operation 1 was sarcomatous, 2 were softened, and in 2 there was no change. In 4 cases of myomata removed shortly after pregnancy it is important to note that the growths were necrotic and that the necrosis was no doubt due to the pregnancy. The manner of the change, whether it is due to uterine contractions during labor or to the anemia of the puerperal uterus, is not known. Myomata rarely require operation on account of pregnancy. Six cases of the 23 were operated upon; 4 were radical operations for fibroids and 2 were conservative. The writer is in general in favor of radical operations for fibroids, but in pregnancy is inclined to a more conservative principle, because in 70 to 80 per cent. of cases reported pregnancy is undisturbed, because the mortality of about 300 reported cases is only 2 per cent., and because the symptoms for which operations are performed during pregnancy are cured as surely as symptoms from fibroids apart from pregnancy are cured by operation.

Charlotte Medical Journal

EDWARD C. REGISTER, M. D., Editor.

No. 36 South Tryon Street, - - - -

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THE FIFTY-THIRD ANNUAL MEETING OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.

The Medical Society of the State of North Carolina will convene in fifty-third regular annual session in Charlotte, N. C., on May 29, 1906, and remain in session for three days.

From all sections of the State come manifestations of an active interest in the affairs of the Society, and every indication points to an unprecedentiy large attendance upon the meeting. The selection of Charlotte as the meeting place was an ideal one; admirably located geographically, easy of access, with ample hotel accommodations for all who may possibly come, every promise is given of material comfort and convenience to the members.

The spirit of hearty appreciation of the coming of honored guests which is being manifested by the Mecklenburg County Medical Society and the citizens of the city of Charlotte give an earnest of pleasant things in the social line, which are always of interest to visiting doctors when attending these annual conventions.

The usual reduced rates have been given by the railroads upon the certificate plan—one full fare going (taking a receipt for same when purchasing ticket), and one-third returning, with time limit extending from May 23 to June 2. This latter arrangement is especially for the convenience of the applicants attending the sessions of the State Board of Medical Examiners which meets six days in advance of the Society, on Wednesday afternoon, May 23.

The Secretary, with his accustomed zeal and energy, has been untiring in the securing of papers for the meeting, and already it is apparent that the number of papers presented will be large and the grade of a high character. The practice wisely commended in the Society's By-laws, of reading papers first in the County Medical Society, then revising and rewriting after discussion there, is growing much more common than it was a year ago, and is one to be encouraged, being at all times calculated to improve the standards of professional writing on the part of our members. Members not having already sent in their titles to the Secretary should do so immediately.

The social features of the meeting will be very attractive. It is very likely that on the evening of Tuesday a reception will be tendered the visiting doctors at one of our clubs, on Wednesday evening a most elaborate banquet, while numerous additional private functions will be provided for the entertainment and pleasure of the members.

That any North Carolina doctor should be urged to take a vacation and attend this session of the State Society seems superfluous, yet there are some good men who will hesitate at the last moment for fear of inconveniencing some favored patient. To all such we emphatically say, Doctor, break loose from the steady routine, the deadening monotone, and come to the Society meeting. You will return home a better and a brighter man for the contact you have experienced with a few hundred others of your fellows who live the same lives, have similar experiences, cherish kindred ambitions, face like dangers, achieve the identical successes, endure the familiar types of personal discomfort, with results, financial and otherwise to which you are no stranger, as yourself. Outside of the loved ones of your own family circles, there are none who can, and do, so fully enter into and cordially appreciate and sympathize with the burdens you necessarily and constantly bear day in and day out the year round, as your fellow physicians.

Come to this meeting in Charlotte, and in scientific papers and discussions you will hear anew the technicalities of your profession portrayed, the manifold faces of human disease and suffering delineated and the legions of remedial measures intelligent observation and experience has devised for their amelioration and cure will be again placed before your mind. While in the perhaps less technical, more personal and friendly discourses, of the corridors and hotel lobbies, and the luminous celebrations of the banquets and receptions, you will be regaled with the social side of the doctor's life.

Come to the meeting Doctor, you will not only not regret it, but you will carry home with you impulses more generous to your fellow doctors, impressions pleasing to recall, therapeutic suggestions beneficial to your clientele, all of which combined will make you feel the balance of the year the trip was a most excellent investment from every view-point. Come, Doctor, the Society needs you—Charlotte wants you!

LICENSE TAXES REMOVED FROM RICHMOND PHYSICIANS.

The Board of Aldermen of Richmond, Va., recently on their own accord, without being influenced, voted to remove license taxes from physicians practicing in that city. The act was referred to the Common Council for concurrence and that body pass-

ed upon it favorably by a vote of 26 to 3. According to the Virginia Medical Semi-Monthly this places the city of Richmond as the first of municipalities, as also of the counties of the State of Virginia, to relieve the practitioners of medicine from the very unjust burden which was placed upon all the doctors of the cities of that State. It is expected that the legislature, which is now in session, will repeal the law imposing State license taxes on doctors practicing in the State of Virginia. Dr. J. B. DeShazo, of Ridgeway, Va., chairman of the committee of the Medical Society of Virginia having charge of legislation on this subject, believes that the probabilities of success of the efforts of the committee to have the State law repealed are very good. We congratulate our neighbors on being more successful in this line of reform than we are in North Carolina. Every doctor in North Carolina has to pay a license tax. It is unjust and should be repealed.

BERLIN DOCTORS.

According to newspaper reports hundreds of physicians in Berlin do not make more than $4 00 per week. Some remarkable figures demonstrating the overcrowded state of the profession in the large cities of Germany have recently been officially published. They indicate the incomes received by physicians practicing in the large cities there. This report says that there are 247 medical men in Berlin who have incomes of less than $225.00 a year. 859 earn between $225.00 and $1000.00 annually, while 146 have an income between $1050.00 and $1250.00. Very few doctors in Germany have anything like a decent income. A very prominent specialist in Berlin is reported to have an income of $80.000 a year and another has an income of $65,000. It is claimed that six have $25,000, three have $20,000, and a great many have incomes of from $5,000 to $15,000, but not over about twenty. This great number of medical men have been a long standing evil to Berlin life, but the Berlin medical schools continue to turn out crowds of qualified young men each year to make the ranks still larger, which will in all probability decrease their incomes

EXPERIMENTAL CIRRHOSIS.

The opinion of Kretz that cirrhosis of the liver is primarily a reparative process, has lately received another corroboration. He believes that cirrhosis of the liver is a chronic focal or localized, recrudescing degeneration and partial destruction of the liver parenchyma, attended by marked regeneration on the part of the liver cells leading to complete change in the general arrangement of the liver lobules and followed by reparative and replacement activities on the part of the connective tissue. The process begins at the periphery or in the mid-lobular area, dependent upon whether the poison be carried by the portal vein or hepatic artery respectively. There is a necrosis of the liver cells which is followed by immediate efforts on the part of the intact cells to regenerate. By continuation of the aetiologic agent the regeneration is incomplete and the connective tissue begins to proliferate to fill the deficiency. This new tissue contracts as all connective tissue does, with consequent alteration of the lobular and perhaps lobar structure. The work of Pearce (Journal of Experimental Medicine, Vol. VIII, No. 1) shows that this primary parenchymal necrosis is of importance. By injection of immune rabbit's blood into dogs he was able to produce at first a congestion, later a necrosis due to this congestion, which began first distally to masses of agglutinated red blood corpuscles in the capillaries and smaller branches of the portal vein. The reparative process began immediately by the removal of necrotic cells by endothelial cells, and proliferation of the liver cells themselves. Then began a granulation tissue which rapidly underwent a metaplasia into the usual very definite connective tissue. When the animal lived any length of time the liver was found much firmer than usual, had a finely granular surface and was deeply bile stained. "The capsule showed irregular areas of thickening and was mottled by an ill-defined congestion. On section, a distinct pseudo-lobulation was evident, definite islands of brownish yellow liver tissue being marked off by a fine grayish network of newly formed tissue. Histological examination showed broad bands of connective tissue entirely replacing the necrotic areas and forming a uniformly arranged network separating the surviving islands of liver tissue about the larger portal spaces. The new tissue is distinctly fibrous and contains many newly formed blood vessels and bile ducts; it stains deeply by Mallory's method for connective tissue. The formation of new liver cells is still demonstrable."

This is truly an experimental cirrhosis and agrees with Bostroem's observations on the cirrhosis following chronic congestion. He thinks that congestion causes cirrhosis no more by its mechanical effects than by the nutritive changes it may produce.

The value of this work lies in the fact that, as it is a more characteristic cirrhosis than has yet been produced upon animals, it shows the reparative and regenerating powers of the liver, and the tendency of the liver to undergo necrosis by congestive agents, be it from a purely mechanical cause

or by reason of the altered metabolism which these agents bring about. At any rate it does not thoroughly elucidate the pathological program of the disease further than that connective or scar tissue may arise as a consequence of parenchymatous degeneration.

TREATMENT OF EPILEPSY.

The etiology of epilepsy is still undetermined, but the consensus of opinion today is that given a cortical lesion or nervous susceptibility some toxin or toxins formed in the system gradually accumulating produce a sudden vaso constriction causing a hyperemia and consequent increased pressure on the brain.

The cortical lesion may be due to an ante or post natal traumatism, but it is also possible that the toxins being present in the system produce cerebral pressure which may produce the brain lesion.

That the toxin exists in the plasma and that it is probably of the nature of an acid is fairly certain, cholin and neurin have both been found in the blood, and in the cerebral spinal fluid and are both convulsants, but as they are the result of the decomposition of lecithin due to degeneration of nerve substance it is improbable that they are the primary cause of the disease. The treatment of epilepsy can only be considered palliative, the bromides act by reducing the nerve irritability and by depressing the heart, they reduce the number and severity of the spasms. The epileptic almost invariably suffers from hyperchlorhydria with excess of mucus and constipation, consequently full doses of alkalies are indicated preferably in the form of Riegels mixture, to which bromide can be added if necessary. Suprarenal extract seems to have the power of steadying the vasomotor nerves and in some cases reduce the number and severity of the spasms where the bromides fail. Adonis Vernalis digitalis and belladoma are of value.

The diet should contain not more than 6 grms of nitrogen in the 24 hours, the end products of proteid metabolism are more or less toxic while those of carbohydrates are carbon dioxide and water. Occasionally there are cases where carbohydrates seem to increase the number of spasms, probably due to the high acidity of the stomach preventing their digestion. In order to treat epilepsy to the best advantage each case must be studied carefully and every source of irritation, whether chemical or physical, removed and to this end the examination must be very complete.

If it is possible to observe the patient in an attack some information may be obtained as to the locality of the cerebral lesion and though surgical interference has not given very brilliant results, yet the chance should not be overlooked.

Eye strain is sometimes an exciting cause, and, though more rarely, diseases of the teeth, jaw, irritation in the nasopharynx, and adenoids. Perverted secretion of the thyroid gland may occasionally be the cause, in Basedows disease epileptoid convulsions are not uncommon, a very few cases are benefited by the administration of thyroid. Careful analysis of the stomach contents after a test meal and a complete quantitative analysis of the urine, especially for the ammonia, urea, and residual nitrogen, are of special value, evidence of metabolic perversions can often be obtained from the urine, the correction of which benefits the patient. The blood pressure should be taken at various times and its relation to the attack should be carefully noted.

If the patient has a marked aura a spasm can often be avoided by his inhaling amyl-nitrate which he can carry with him. With our present khowledge of the chemic factor producing the spasm little more can be done than to attend to the hygienic details and administer bromides, alternating them with opium occasionally to hold the spasms in check.

The Association of Surgeons of the Atlantic Coast Line Railway met in Tampa, Florida, March the 20th and 21st. Dr. Southgate Leigh, of Norfolk, Va., is president and presided. The meeting was an exceedingly interesting one. On the first day the meeting was addressed by Dr. W. L. Estes, of South Bethlehem, Pa., and Dr. Pearce Bailey, of New York City; also by Mr. George Elliott, Assistant Counsel of the road. During the meeting Dr. Brock, of Richmond, Chief Surgeon of the Chesapeake & Ohio Railway, addressed the Association. The second day was taken up in the discussion of papers presented by members of the Association.

THE TRI-STATE MEDICAL ASSOCIATION OF THE CAROLINAS AND VIRGINIA.

This Association held its 8th annual session February the 27th and 28th at White Stone Lithia Springs, S. C. The program was full and many valuable papers were read by men of distinction. Dr. H. A. Royster, president, performed his duties well. His manner of presiding over a medical meeting is very attractive. He made a fine impression on every one who came in contact with him and his address, which was entitled "Modern Types of Doctors," was splendid and one that will do a great deal of good. The meeting ought to have been a three days session. Many of the

papers that had been prepared and were on the program were not read. The two days were almost entirely taken up in the Surgical Section. Possibly the section on surgery in all these meetings may be the most important and the most interesting, at the same time at a meeting like this it is well enough to have the program arranged so that every paper prepared can be read. It always produces a little feeling of disappointment when a man prepares a paper and does not get a chance to read it, too when the time is taken up by the Association discussing things that he is not specially interested in. I don't see how any surgeon could attend a meeting that would be more profitable to him than the one at White Stone Lithia Springs, because many men well known all over this country, some internationally known, were present, all surgeons and read papers and discussed them at length in a way that would benefit any one who is at all interested in that line of work. It is rather doubtful whether it is the best to have quite so many invited guests at these meetings. At this meeting fully half of the time was consumed by the invited guests, all discussing surgical subjects.

The selecting of White Stone Lithia Springs for a meeting place was a mistake. It was not accessible; it was a very inconvenient place to get to; besides the hotel is purely a summer house with very few facilities for heating, consequently the guests suffered with cold, and were not comfortable. The hotel proprietor seemed to be very anxious to do his best to make the guests comfortable, but he made a failure in doing so. The fare in the dining room was abominable. They did not seem to have enough waiters or enough to eat. I have always been opposed to letting hotel promoters for money making purposes persuade medical associations to meet with them. I have never yet known such meetings to be as successful as when they meet in cities.

Dr. R. E. Hughes, of Laurens, S. C., was elected president, and Dr. J. Howell Way, of Waynesville, N. C., was elected secretary. Dr. Isaac M. Taylor, of Morganton, N. C., was elected vice-president for North Carolina, and Dr. B. K. Hays, of Oxford, N. C., member of the Executive Committee. These gentlemen will do a great deal to make the association larger and more useful.

SCOPALAMIN MORPHIN AS A GENERAL ANAESTHETIC.

A very short time after Sir James Y. Simpson, with chloroform, and Morton and Wells with ether, had established the actuality of performing major surgical operations without pain and with an enormous decrease in mortality from shock, surgeons the world over commenced experimenting in the hope of producing anaesthetics which would lessen even the relatively slight discomforts and danger attending upon the use of chloroform or ether. These experiments have been carried on with unabated activity to the present day.

Among the most recent contributions to the group of anaesthetics, are spinal anaesthesia by Stovain, and the anaesthesia produced by the hypodermic exhibition of scopalamin hydrobromide.

This method though known and practiced ages ago in a crude way by Hippocrates and his pupils, was reintroduced in its present form to the profession by Schneiderlein in 1900. He had used the drug as a hypnotic in insane patients and conceived the idea of attempting surgical procedures under its effects. His results were fairly successful, but the method was not generally employed and fell into disuse, until revived by France and Germany in 1903. It has been used in this country in a fairly large number of cases, but while receiving enthusiastic endorsement from some operators, it is viewed with suspicion by far the greater number, and is heartily condemned by a third group.

The advantages of the method as described by Babcock, of Philadelphia, are its ease and comfort of administration—the fact that anaesthesia is lessened as the operation is prolonged and the absence of the post operative complications so often traced directly to the anaesthetic in the inhalation methods.

The chief disadvantages are the uncertainty of the drugs action, the difficulty of procuring uniform and reliable preparations, and the fact that deep muscular reflexes are not abolished and interfere very markedly with the success of operations, requiring absolute muscular relaxation.

According to A. C. Wood, the greatest value of the method at present is as an adjunct to ether or chloroform narcosis. As to the use of scopalamin morphine anaesthesia in operations involving the mouth and respiratory tract opinions are greatly at variance.

One experimenter found it of great value under such circumstances, while others regard operations upon the air passages as direct contraindications to the use of this form of narcosis. The most grave objection yet made, however, to the use of scopalamin, whether or not combined with morphine, as a general anaesthetic, is the number of fatal cases occurring during its administration. This has been explained by

some writers as being due to the class of cases in which the drug has been employed —the cases being so advanced or in such precarious condition that ether or chloroform is absolutely contraindicated.

It is claimed that most of the deaths occurring under scopalamin would have taken place just as surely and in all probability with much greater rapidity under any other form of anaesthesia. This explanation, however, will not defend the deaths recorded as directly due to the scopalamin by virtue of its depressant effect upon respiration. Several such cases have been reported and the number is increasing constantly and with great rapidity.

Very recently a French writer collected twenty-two fatal cases occurring during the anaesthesia and for which the anaesthetic was probably responsible. His conclusion, after detailed analysis of the cases, is to the effect that "Any one using this notoriously unreliable and dangerous technic, incurs a heavy responsibility."

Upon the whole then it may be stated that while anaesthesia by the simple hypodermic expression of a minute quantity of scopalamin and morphine offers an alluring field to the surgeon, and more particularly to the gynecologist, dealing as he does with so many nervous and hysterical women—it should constantly be borne in mind that this method is untried and in the experimental stage and that serious complications or even fatalities may easily result from its employment.

Unless the well known and reliable anaesthetics are absolutely contraindicated, scopalamin should not be used, except with the distinct understanding of the patient that the method is at best a doubtful one, though brilliant results may be achieved by its use.

INSURANCE EXAMINATION FEES.

Much interest has been excited in the offices of the Life Insurance Companies of the country over the resolutions adopted at the 1905 session of the State Medical Society of North Carolina. As we understood at the time the purport of the resolution was merely to express the sentiment of the Society as to what should be the charges for insurance examinations and the county societies were recommended to adopt the resolutions and to live up to them.

Many of the county societies in this State have done so. A few have taken no action. One or two have adopted them in a modified form, with ample loop-holes to enable any member to charge practically as little as he chooses for making examinations.

The proper charge for certain professional services is ever a hard and knotty question for adjustment, and we appreciate the diffident attitude of some of our very best doctors over the suggestion of any attempt to regulate fees for services rendered. It is assuredly a most difficult matter to get men to live strictly by any standard which runs at times counterwise to the apparent interests of others.

Developments of the past month more than before emphasize both the wisdom and the vital importance of the profession standing as a unit in this matter. One of the large companies extensively working North Carolina has secured in a single eastern county society a "concession made to it on account of its examiners being in the minority numerically and having agreed several years ago to examine at a less fee." This big company with its well paid officials is systematically canvassing the State asking physicians "if they will not support a modification of this rule as was done in ——— County last week."

Now we submit that this is simply little short of an outrage on common decency and we sincerely trust the able capable doctors of North Carolina will treat such an attempt at dictation by a foreign corporation with the deserved contempt.

Another of the largest is systematically sending blank applications for appointment as medical examiner for the company to all registered physicians of the State asking them to accept the appointment, while gently tucked away in the body of the application is an agreement to examine at the reduced fees desired by this great company which only recently, until an outraged public demanded the robbery stop, paid its president only a hundred and fifty thousand dollars!

One of the "big three" in an apologizing note to its examiners says "it is impelled by the public outcry of extravagance to reduce salaries and fees and we feel sure the medical staff will accede to their proportionate scaling."

And yet in the face of all this scheming and manipulating going on and emanating from the head offices in the east, in contrast comes the private remark of a prominent State agent last week to the effect that "the matter of the examination fee is with the home offices and the doctors, but of course you know if the doctors stick up for five dollars they will get it."

And that covers the whole ground and we believe the high-toned, self-respecting medical profession of North Carolina are determined to stand square and firm for their rights in this matter.

In the matter of fees for ordinary professional services it is quite apparent there never can be—in fact there never should be

in real equity to the parties at interest—absolute equality of charge between all physicians of the same community. The services of some medical men are absolutely worth more than that of some others and to enact an absolutely hard and fast fee bill relating to the charges for the everyday practice of physicians is about as absurd a proposition, when viewed as an entity, as the recent suggestion of one of the miner's unions to limit the amount of coal which any common day laborer should be permitted to dig—a piece of the cheapest order of trades-unionism! All doctors are not worth the same, and while at times we see men getting exorbitant fees for seemingly trivial services, yet we must remember there is a vast amount of work done for humanity's sake, for which the physician neither expects nor receives any compensation. Hence I am prone to say that I never hear of any physician getting the proverbial "fat fee" but that I do not feel like not only congratulating him but myself as well, for it opens up opportunities to us all.

But no matter what regulations may be had it is manifestly impracticable to get all the physicians to regard their work as of equal value. With reference to this insurance matter it is very evident that the action of the State Society has been the subject of much interest and many suggestions have come to the officers of the Society from insurance organizations.

Several of them have boldly assumed the State Medical Society was a place where things could be managed a la Andy Hamilton and prominent members of the North Carolina profession have been asked to agree to stand for the adoption of certain amendments at the next meeting. One company recently secured the adoption of a modification of the resolutions in a certain county society and then proceeded to flood the State with circular letters to prominent physicians stating what this county society had done and kindly asking him to take the same attitude toward the matter in the next meeting of the State Society. This we regard as the greatest piece of presumptious impudence we have seen in a great foreign corporation for some time. Assuredly the Medical Director of this company (if he is a capable and honest man) places a very low estimate upon the profession of this State.

But considered from all standpoints one thing is evident: The companies are really concerned, as one of them very concisely stated it in a recent letter to the writer, "Our company does not wish to be placed in the attitude of employing Cheap-John doctors for our work, and we really hope there can be some mutually satisfactory adjustment of the fee matter." This letter, with others of recent similar tone, tends to show the doctors have won the fight *if they have the manhood to stand by their guns!* This we earnestly hope every doctor in the State will do, as it means much to the profession that we receive fair and reasonable compensation for professional services from those able to requite us—and assuredly if there be any among our clientele who are financially in a position to respond to a proper demand for compensation it would seem to be the life insurance people. We again urge the North Carolina doctors to *stand for their rights and for their professional honor.*

In connection with this vital matter it should be pleasantly noted among our profession that the several Southern life insurance companies recently starting in business here in North Carolina have each, so far as we have heard, manifested a proper spirit of consideration for the medical profession in that they have shown a disposition to regard the right of the profession to arrange a proper fee for insurance work which they have cheerfully paid.

A STATE SOCIETY FOR THE PREVENTION OF TUBERCULOSIS.

At the last meeting of the North Carolina State Medical Society a discussion was held as to the advisability of steps being taken to organize a State Society for the Prevention of Tuberculosis. A committee composed of the following named gentlemen were appointed to carefully consider the matter, prepare a definite plan of organization and report thereon at the next meeting of the State Medical Society to convene in Charlotte May 29-31.

This committee is composed of leading physicians and sanitarians and it is assumed their recommendations will carry much weight with the Medical Society, and an influence with the public as well. We understand it is the purpose of the suggesters of this new Society to include both laymen as well as physicians in its active working membership and a determined effort will be made to thoroughly and systematically acquaint the public with certain (to the medical profession) well known facts relative to consumption and the best practical means of preventing its ravages.

The report and proposed line of action of the committee will be given due publicity at the meeting of the State Medical Society and will be looked forward to with interest by physicians and the general public as well, who understand that almost one-sixth of all deaths are due to consumption, and the majority of the cases should be prevented ever developing, and likewise the ma-

jority of the cases developed should, if promptly recognized and properly treated, be cured. The President of the State Medical Society has announced the following committee:

Dr. M. L. Stevens, Asheville, Chairman.
Dr. R. H. Lewis, Raleigh.
Dr. Jas. M. Parrott, Kinston.
Dr. C. M. Strong, Charlotte.
Dr. J. Howell Way, Waynesville.
Dr. Albert Anderson, Wilson.
Dr. Geo. G. Thomas, Wilmington.
Dr. Jas. A. Burroughs, Asheville.
Dr. Ben. K. Hays, Oxford.
Dr. W. H. H. Cobb, Goldsboro.
Dr. C. A. Julian, Thomasville.
Dr. Watson S. Rankin, Wake Forest.

THE QUESTION OF CARCINOMA COMMUNICABILITY.

It has come to be a fixed opinion in the minds of many scientific observers that carcinoma and sarcoma are transmissible, and some have asserted that a distinct inheritance is very improbable. If this opinion be confirmed the transmissibility may depend upon the environment of a supposed inheritor, who having lived with or nursed the parent, may be suitable soil for the implantation of the infecting agent.

The work of Crunbaum, Beard, Farmer, Moore, and Walker, shows that there is a morphological continuity of the germ cells, and that there is heterotype mitosis in malignant tumors. Further that from one of the primary chorionic cells a certain number of spores are produced, one of which becomes the embryo and encloses the others in it, handing them down to the embryo as its germinal cells. These may go astray and be the point of origin of a malignant tumor where they lodge. This heterotype mitosis occurring in the germinal cells normally, which differs from normal division chiefly in having only one-half the number of chromosomes, has been found in malignant tumors. If this extend to the third generation, the hereditary character would possibly be justified. The immediate cause of a carcinoma, provided this misplacement occurred, might easily be a trauma or irritating infection at the point of lodgment of this aberrant germinal spore.

The trauma theory of malignancy production has found no solid foundation except perhaps in autoinoculation, the newer growth in such a case being only primary in its structure.

The parasitic and infectious theory rests upon many foundations. Many men have observed carcinoma to appear in families who had moved into houses where families, members of which had suffered from cancer, had previously lived, there being no relation between the two. One author asserts his knowledge of a village in which carcinoma was unknown until a person who was suffering from such a growth moved there, after which three or four cases developed in a few years.

There seems to be more malignant disease in cities, both absolutely and relatively (except carcinomata and sarcomata of exposed skin) than in country towns or farming districts. There seems to be good proof (Hyde) that those white persons exposed to light and weather effects, suffer more from skin growths of malignant type than persons who are more protected. This is well shown in the fact that women and the colored races in general are proportionately less frequently affected by this form of growth.

A. L. Smith asserts that it is the exception for a person affected with a malignant growth to have had a parent die with such a disease; moreover, he has known cancer patients to have nursed or lived with another previously so invalided, from whom he believes they contracted the disease.

It has been shown that tumor masses or extracts injected beneath the skin of mice will grow, but they never assume the characters of the original, that is, growth by replacement of the tissue in which they grow or by producing true metastases in the animal. The blood and other body juices of these animals will, however, protect another mouse, if the cancer mass and blood be injected together; or if the latter be injected sometime after the former, the growth will cease to develop or disappear. This may later be shown to have a distinct relation to cancer production but at present we must consider the probability of irritation of the tissue of the mouse by this foreign body and later by anti-foreign bodies produced by the mouse's blood.

The malignant tumors, carcinoma and sarcoma, are specific, that is, they do not show metaplasia from one to the other. They may be sometimes seen in the same growth but it is not difficult to conceive that they might both form when epithelial and connective tissues are present in the same locality. This being accepted, the parasitic origin of both would, of needs, be specific. Erhlick injected carcinoma tissue into a mouse, and the resulting growth being sarcomatous. This speaks rather against the parasitic theory unless we suppose that what is a specifically carcinomatous agent for man may be specifically sarcomatous for mice, which hypothesis is irrational.

Still again, benign tumors of the uterus or ovary sometimes show a malignant degeneration. As these tissues are not often the seat of chronic specific inflammations,

it requires a little imagination to see how they would be the resting place of predilection of an agent which would subsequently cause a change in them radically inharmonious with their original structure. There are a few cases on record of multiple primary new growths, some few of which are mixed, that is, partly benign and partly malignant. When they are alone in the individual masses they produce analogous metastases, but if they are together they may produce new foci of one or the other type or a combined picture. Unfortunately the cases of primary multiple tumors are too rare, but it is to be hoped now that the interest of the medical world is so awakened to this study that all cases of malignancy of atypical nature or of apparently infectious origin will be reported.

The infrequency of multiple mixed tumors or multiple tumors varying in character rather speaks for the theory of parasitic origin.

These and many other questions must be settled before we can arrive at the truth of this matter, the surest way of getting at which is the close observation of all cases especially referable to the existence of growths in the relations and others who come in contact with the patient. If there exists a growth in one of these latter, it would be of the highest importance to know if it be of the same type. An observation on husband and wife, showing a distinct similarity in the two growths, would be almost conclusive.

Review of Southern Medical Literature.

Texas Medical Journal, February, 1906.

The Treatment of Incipient Insanity.—Dr. A. D. Young believes that the first requisite in the management of these cases is a good nurse, preferably one experienced in this line of work. Without such a one the necessary control of the patient is lost and a regular course of treatment cannot be carried out. The condition most frequently encountered in what may be called the curable cases of insanity is one of malnutrition. The patient is pale and anemic. The diet must be abundant and of the most digestible kind. It is astonishing how much nourishment a patient can sometimes take without disturbance of the digestive organs. Milk and egg albumen are probably the best of the foods for forced feeding. When there is no organic lesion of the brain whiskey and wine may be added with benefit. Vegetables and fruits, especially those with small amounts of starch, should be given freely, while the various meat broths are suitable and serviceable. Many melancholiacs and some maniacs refuse to eat and must be fed forcibly by means of the stomach tube passed through the nose and thus into the oesophagus. In addition to forced feeding the ordinary bitter tonics should be administered to stimulate the digestive organs to their greatest activity, and some form of organic iron should be given in conjunction with them. Strict confinement in bed as a rule is not beneficial and may do harm. However, it may be necessary for patients who are very weak. As for violent maniacs it is better to send them to the country in charge of competent attendants, where they can enjoy the open air and be diverted and amused in a quiet way. Sedatives should never be used unless other means fail, as they are seldom beneficial to the future course of the disease, and even at times retard recovery. If the family is one with means so that proper attendants, suitable food, and change of surroundings can readily be obtained and if there is no homicidal or suicidal tendencies these cases are better treated at home.

The Louisville Monthly Journal, February, 1906.

What is the Best Way to Preserve the Sphincter ani muscles in Operating for Fistula in ano?—Dr. J. M. Matthews points out that fistula in ano frequently, though not always, involves the sphincter muscle. It is commonly taught that if a channel could be traced down to the mucous membrane of the gut the probe or grooved director should be pushed through into the bowel, thereby making the fistula a complete one and all tissues held upon the director divided. There are many cases of fistula in ano which have no connection with the rectum, and this point should be more definitely taught. Even in those cases where the fistula communicates directly with the bowel the division of the sphincter is not always indicated for the following reasons: First, there are such conditions, generally, as would tend to prevent the restoration of these muscles if cut. All who have operated for fistula in ano in the tuberculous subject are aware of the fact that the healing of the muscle under such conditions is at least uncertain. Also in the syphilitic rectum or ulcerated rectum from whatever cause. The healing process in all such is very tardy and the sphincter muscles would be the most pronounced in this tardiness. Second, outside any systemic condition which would tend to induce a non-union of the muscle after being divided there are persons in apparent good health who have very delicate sphincter muscles. This condition not being caused by any previous operation or of any disease of the body. Third, in operating on women we should

be especially careful in the division of these muscles because of the anatomical conditions.

The repeated failures reported and experienced by surgeons to cure this troublesome affection comes, in the author's opinion, from the light way in which they view the disease and the imperfect operation which is done in consequence. The author reports four cases illustrating four phases of the disease in which the sphincter muscle was preserved.

Case 1 was one of fistula following incision and evacuation of pus of an ischiorectal abscess. Operation: A free incision was made over the site of the external opening and a finger inserted into the ischiorectal fossa. Running from the fossa numerous channels were found that would admit the finger. All of these were freely laid open, edges trimmed, the curette freely used, and the bottom of the whole wound burned with the actual cautery. A deep channel was made for drainage purposes, reaching from the site of the internal opening outward. Further examination revealed the fact that a sinus extended into the other buttock over the lower portion of the sacrum and still another passing through the perineum. A free incision was made around the gut through these passageways and several sinuses were attacked on this side. Case 2 was one of the horse shoe variety with one opening in the gut. Case 4 the opening was a little to one side of the perineum and was connected with the bowel. An incision was made to the internal opening and the wound drained backward, leaving the muscles intact. In none of these cases was the sphincter divided, the author having repeatedly operated on cases of this kind by this method and has gotten perfect results and therefore believes it better not to divide the muscle than to divide it if as good results can be obtained.

The Medical Recorder, February, 1906.

Inguinal Hernia.—Dr. J. P. Runyan says quite frequently is the surgeon called to see some one who has a strangulated hernia and who has carried his hernia around with him for a number of years unaware of the fact that an operation is ever done for the relief or radical cure of such conditions. The stand taken by the railroad companies through their chief surgeons has done more recently to educate the laity to the importance of this subject than any other agency. When an otherwise healthy applicant for railroad service is rejected because he may have inguinal hernia that has never given him any trouble except the wearing of a truss and that in order to be eligible for train service he must submit to a surgical operation, he has been taught two very valuable lessons too often neglected by the family physician, who should inform the patient of the little danger attached to an operation for a radical cure and the permanency of the results as well as the great satisfaction experienced in being able to dispense with the truss. As no conscientious physician now hesitates to advise his patient to avoid a second attack of appendicitis by going to a surgeon and having his appendix removed, so should he also recount the dangers following an inguinal hernia to go unoperated on and expose the groundless fears which the patient may have against the safety of the operation. The author briefly describes the operation as done by Dr. Chas. H. Mayo as follows: Incision is made as in the ordinary Bassini except the external ring is left intact. After dividing the aponeurosis of the external oblique the sac is sought and freed from its attachment to the cord, well up to the internal ring with as little disturbance of the cord as possible. The sac is now tied off at the internal ring and excess of sac cut away. The suturing is now begun. Suture the upper margin of the aponeurosis of the external oblique and the internal oblique to the shelving edge of pouparts ligament. The margin of the external oblique aponeurosis is now imbricated on the upper margin and is sewed in this manner, the suture beginning with the superficial fascia on one side of the incision and ending with that of the other side.

Gaillard's Southern Medicine, February, 1906.

A Successful Ceasarian Section in Country Practice.—Dr. S. A. Reynolds says that in February, 1905, he was called in consultation with Dr. S. E. Keen to see a colored girl of 13 who was in labor at term and had been for twelve hours. On examination found the pelvic diameters less than two inches. Realizing the seriousness of the situation, as neither of them had ever done a laparotomy, and being poorly equipped the case was undertaken. The armamentarium consisted only of two pocket cases of instruments, some carbolic acid and a few ligatures, an earthen pitcher and bowl with a teakettle of hot water. The hospital was a log cabin with one door, a fireplace, and a hole twelve inches square in the end of the house without glass for a window. The trained nurses were old colored women, one of which was a midwife. The only means of illumination being a small lamp without a chimney. Instruments and sutures were sterilized in hot carbolic acid solution, hands washed with soap and water and rinsed in carbolized

water. Chloroform was given by Dr. Keen, patient being placed across the bed with feet on the floor, abdomen washed and sponged with carbolic solution, made an incision along the median line from umbilicus to the pubis, laying bare the uterus. The abdominal walls were pressed down on the sides of the uterus which prevented the blood from entering the abdominal cavity, opened the uterus by making an incision from the fundus to near the cervix on its anterior side just beneath the abdominal incision. The fœtus, placenta, clots, etc., were then promptly removed from the uterus. The uterus contracted rapidly, so had no difficulty in putting in stitches. One stitch was placed in the middle of the uterus incision and then all blood and clots were removed from the abdominal cavity. The abdominal incision was closed with silk and were stitched and sponged off with carbolic solution and dressed. The following day patient complained of pain on urination which was caused by the use of the catheter during the operation. On fourth day temperature was 103.5, pulse 150, respiration 36. In four weeks the patient was allowed to get about the room. The author desires to call attention, first, that the patient suffered very little pain and that only when urinating or coughing, and that during her sickness no opiate or anodyne was given; second, that while the well equipped city hospitals with their beautiful and attractive nurses, which have been such a comfort and blessing to suffering humanity, is the best place for surgery, yet that good and effective surgery can be done in the little log cabin in the country with the many obstacles and disadvantages with which a country physician has to contend; third, that we should never be afraid to put forth an effort to relieve our patients when absolutely demanded, however hazardous or difficult the means at our command.

New Orleans Medical and Surgical Journal, February, 1906.

Outline of Treatment of Blackwater Fever.—Dr. E. M. Dupaquier gives the following: Quinine is useless and harmful, useless during the attack, and harmful before the attack. It is most commonly the cause in those suffering from periodical attacks of malaria insufficiently treated. Bastianelli's old formula to give quinine only when malaria parasites are found in the blood remains still a safe guide, since from the latest authoritative statements we understand that parasites are found only in a few cases, not every case as some say. There is no substitute for quinine. There is no drug of value against blackwater fever. The symptoms must be met as best we can. The use of styptics is unpardonable. The treatment is similar to the way yellow fever is treated here. Confinement in bed at once, recumbent position for convalescence, warm water draughts with sod. bicarb. in them is an emetic to get rid of irritating bele causing exhausting vomiting. If the stomach is settled patient must take five grains of calomel and then start drinking water freely to keep the kidneys flushed, while hot fomentations and turpentine stupes are applied to the loins to relieve pain and prevent suppression. Patient must be fed with orange juice, barley water, and milk and broth if retained. Alcohol is not necessary except in male patients. Careful sponging with tepid water every two or three hours is also necessary. If stomach is not settled after emetic instead of the calomel give irrigation of colon. Give water and food per rectum. Inject under the skin abundance of normal salt solution. The sad occurrence of blackwater fever can be prevented by eradicating at the outset the malarial infection by systematic acclimization, just as you could prevent the later severest manifestations of syphilis by a thorough and systematic mercurialization at the outset. The distinct of habitation is an all important matter and must be evaded until the anopheles with sporozolites are destroyed and the inhabitants take to screening first, which means a great expenditure of care, time and money. Finally as to the hemeoglobinuria caused by exposure to cold or by violent exertions it is not quite definitely understood and doubt arises as to the value of these causes. Look upon blackwater fever as an infectious disease, malaria plus something else and you will be safely guided in both your prophylactic and actual treatment.

Memphis Medical Monthly, February, 1906.

Rheumatism.—Dr. T. J. Happell in this paper gives the following points under treatment. There is no specific for rheumatism. The salicylates relieve pain but do not shorten the duration of the disease. We use salicylate of soda because it lowers the temperature, produces free diaphoresis, thereby aiding nature in her eliminative efforts, and makes the patient easy and comfortable without being compelled in many cases to resort to an opiate. The salicylates to an adult should be administered in fifteen grain doses every four hours either in elixir of lactopeptin, milk of magnesia, or a similar preparation of bismuth. When so given neasua can in many cases be avoided. Capsules containing 3 grams each of phenacetin or acetanilid salol and quinine repeated every three hours till pain is relieved and

then as needed. Should these combinations not relieve pain opiates should be administered, preferably Dovers powder. but where that is not well borne morphia should be given hypodermically in as small doses as possible, suspending its use promptly when relief is obtained, bearing in mind the fact that probably more morphine users have developed from cases of rheumatism than from any other disease. If it is to be continued long the hypodermatic use should be suspended and the drug should be administered per os not allowing the patient to know that he is taking it. Alkalies should be given in the drinking water so as to render all the fluids in the system alkaline. For this purpose bicarbonate of soda is most convenient, but others can be substituted, even using the old neutral mixture. Local applications sometimes afford much relief. In the author's experience preparation of oil of wintergreen rubbed gently on the inflamed joints has more frequently relieved pain. The joints should be wrapped in layers of cotton or wool and covered with close fitting cloth or roller bandage to keep the muscles and limbs in repose and to protect from changes of temperature. The use of blisters are only recommended when all other remedies have been tried and failed. When used they should be small and produced preferably by cantharidal collodion. Lotions of laudanum locally applied to the swollen joints sometimes affords relief. Meats should not be allowed, but give soups, eggs, rice and milk, anything that disagrees and does not digest should be omited, all acid fermentations should be guarded against. As convalescence begins the most nutritious diet should be administered, and tonics, or even arsenic, quinine, strychnine and manganese should be freely given and continued until the normal condition of the blood has been restored. If pains still continue in the affected parts iodide of amonium, sodium or potassium may be given.

Atlanta Journal-Record of Medicine, February, 1906.

Gonorrhœa and Some of Its Results.—Dr. E. G. Ballenger says according to the U. S. census of 1900 there are 20,000,000 men in the U. S. and that it is estimated that 80% of this number have gonorrhoea, which causes. 1. Sexual Neurasthenia which is one of the most intractable conditions with which they have to contend and undoubtedly makes the patient more unhappy than any other non-fatal disease. 2. Sterility through its effect on the epididymes and prostate gland plays the main role in causing sterility and impotence in men. Impotence is one of the disastrous results of damage to the prostatic urethra by the inflammation. It may be complete or partial, as imperfect erection, premature ejaculation, or loss of normal sensation, apparently due to the destruction of the nerve endings in this part of the urethral canal. According to Neisser 50% of all involuntary childless marriages are due to gonorrhoea. Cervical catarrh prevents the entrance of the spermatozoa, thereby rendering the woman sterile. After the inflammatory process has reached the endometrium and tubes still further obstruction prevents the fertilization of the ovum even when the disease has not progressed to pus formation. Morrow has shown that women having it frequently can only give birth to one child, and subsequent trouble is likely to date from this event which furnishes ideal conditions for the growth and spread of the gonococci. 3. General gonococcal infections have also been reported very frequently in recent years, and Winn states that the lesions and symptoms depend upon three factors. 1. Direct infection of the gonococcus itself. 2. Absorption of a toxin. 3. Mixed infection of other germs. Gonorrhoeal infection has no special clinical features which can differentiate it from other pyaemias and a positive diagnosis can only be made by a bacteriological examination of the blood or from an accessible lesion. 4. Blindness. Formerly about 50 per cent. of all blindness was due to gonorrhea, but since the adoption of Crede's prophylactic measures this has been reduced to 20 per cent. 5. The need for reporting these cases. While veneral diseases cause more deaths and deplete the population by causing abortion and preventing conception more than any other known disease or condition this subject is largely ignored by sanitary bureaus in their registration of contagious diseases." It is only in this way that the laity physicians, especially philanthrophists, are to be shown the necessity of taking steps to check the ravages of these diseases. No city in this country has adequate hospital accommodations for the veneral patients. The author concludes by saying that the facts here reviewed will enable one to appreciate more fully the importance of gonorrhea, its widespread and far-reaching effect, and trusts that none of his readers will admit that gonorrhoea is no more to be feared than a cold in the head, and will combat any such criminal ideas on all occasions.

The Mobile Medical and Surgical Journal, February, 1906.

The Way to use Calomel in Typhoid Fever.—Dr. M. M. Moran believes that calomel in half grain doses if given freely at half hour intervals until six doses are taken, followed

in three hours by one half ounce of magnesium sulphate will usually produce from three to five evacuations of the bowels in the twenty-four hours, which is the object sought. A less number of movements is not sufficient, more than this is too exhausting to the patient and should be checked, but not by decreasing the quantity of calomel. Instead add a small quantity of some correctant—preferably Dovers powder. The latter drug is useful also in promoting restfulness and sleep and may on other occasions be advantageously employed when necessary. Along with purgation salol in five grain doses is administered every three hours. Copious draughts of water should be injected after such dose to compensate for the withdrawal of so large quantities of fluid from the system. Many patients have to be encouraged to drink the necessary amount of water. Another service performed by calomel is the removal of the dry, brown, coated, cracked tongue. Calomel certainly has a great sphere of usefulness, even in this popularly-regarded dangerous disease, and should be oftener prescribed in its treatment instead of relying on the usual but more uncertain method of depleting the bowels by enemata, which cannot possibly influence nor reach the seat of the pathological process. The use of calomel is not new. It had the endorsement of the eminent Lieberineister, although his plan was to employ larger doses. Moderate or small doses will accomplish the same results. If treatment be begun in time every case of typhoid should be saved. Cheiv, of Baltimore, had no mortality by the Brand method of treating typhoid in a large practice extending over a period of five years, and was wont to remark that the fact that a homicide had been committed whenever he heard of a death due to typhoid fever. If the two methods—calomel and baths—be used conjointly we attain the disideration of treatment. The only possible contraindications to calomel are perforation and hemorrhage, and even these two alarming symptoms should not deter us from using it, provided we properly guard or restrict its action by combination with suitable agents. There will be no such occurrences if the plan of treatment outlined above be strictly adhered to.

The Texas Medical News, February, 1906.

The Cure and Treatment of Tubercular Throat Affections.—Dr. E. D. Sinks says that most cases of tubercular laryngitis and pharyngitis seen in his section of the country are those in which the disease has become well advanced and we people who have come from some other part of the country. Such cases are of course unfavorable, as they have in addition to their throat affections an involvement of one or both lungs. However, such cases should not be regarded as entirely hopeless, as I have seen numbers of them cured, at least clinically. The fact that the lungs are involved in all such cases demand that special care and attention should be given them as well as the throat, as it is more likely that the throat will respond more readily to treatment if the lung lesions clear up or become inactive, but this point may be overlooked, the author's opinion being based on cases which have come to him from other parts of the country. In the first place the patient should be instructed as to the proper mode of living, as to his diet and general sanitation. In the second place it is not justifiable to class a case of tuberculosis in which there is a high temperature, night sweats, digestive disturbances, exhaustive cough and profuse expectoration as an acute disease and treat it accordingly. No one would think of permitting a case of typhoid fever to walk the streets or rough it, at the same time to eat anything desired, and therefore the author does not see why a case of tuberculosis should be allowed the same privilege while the above symptoms exist.

As to the direct treatment of tuberculosis, throat affections, which in nearly all cases we can reach locally my practice has been to make an application of adrenalin 1-1000 at least twice a day, the action of this preparation being specially indicated by diminishing the blood supply to the parts, and at the same time contracting the tissues. The solution must be allowed to come in contact with the parts a sufficient length of time to enable its action to take place. After the adrenalin has been applied a spray of some soothing agent. such as urethal oil. should be used to relieve the throat irritation and quiet the cough which is due to the local trouble. At the same time it is advisable to spray the nose and instruct the patient to breathe through the organ and not to talk more than absolutely necessary and then in a subdued tone. The author then reports five cases at present under this treatment.

Virginia Medical Semi-Monthly, February 26th, 1906.

Operation for the Radical Cure of Inguinal Hernia under Cocaine Anesthesia.—Dr. Stewart McGuire says that in the evolution of the modern operation for hernia there are different epochs and a different name is associated with each. 1st. The study of the anatomy of the structures involved by Cooper. 2nd. The discovery of general anesthesia by Long. 3rd. The introduction of antisepsis by Lister. 4th. The education of the profession to the use of absorbable

sutures by Marcy. 5th. The publication of a method of constricting the ring and canal that effected a permanent cure by Bassini. 6th. The local use of cocaine in a way to render the operation painless. The essential features of the technique of this operation are the employment of a freshly made one-fourth of one per cent. solution of cocaine; the intracuticular injection of the skin in the line of the incision; the location of the hypogastric branch of the iliohypogastric; the inguinal branch of the ilioinguinal and the genital branch of the genitocrural, and the blocking of these nerves by the injection into their trunks of one or two drops of the solution. The author does not believe the operation can be done by the novice, but to the surgeon who knows his anatomy and has had experience in the special operation the work presents no difficulties. In fact the operation is easier to do under local than under general anesthesia, because the patient is conscious and able to distend the sac by coughing so as to facilitate the location and separation. We can now tell our patient that he can be cured. 1st. Without appreciable danger. 2nd. Without much question of permanency. 3rd. Without more than two or three weeks detention from business. 4th. Without a general anesthetic. 5th. Without pain.

Principles of Surgery Lecture XV—Erysipelas—Detinition—Cause—Description of specific germ—Pathology—General and Local Symptoms—Clinical Types—Diagnosis—Prognosis—Treatment—Curative Power of Erysipelas.—By Dr. Stuart McGuire.

Maryland Medical Journal, February, 1906.

Ancient and Modern Theories of Age.—By Dr. Marshall L. Price.

The Southern Clinic, February, 1906.

The Great White Plague.—By Dr. C. H. Bryce.

The Southern Practitioner, February, 1906.

The Relationship of the State to the Tuberculosis Question.—By Dr. John P. C. Foster.

The American Practitioner and News, Febrnary, 1905.

Injuries of the Urinary Bladder.—By Dr. Irvin Abell.

Southern Medicine and Surgery, February, 1906.

Placenta Previa with Report of Cases.—Dr. W. R. Bishop says that the most important indications for treatment in placenta previa is hemorrhage and the control of it. The life of the foetus should be borne in mind, but the life of the mother is paramount. There are several different methods of bringing on labor and clearing the uterus, viz: Krause's method of passing one or two fingers between the membrane and the uterus wall; this can only be employed when the time is of no moment. A water bag may be placed in the cervix for the double purpose of preventing hemorrhage and of provoking uterine contraction. When a more rapid method is indicated the cervix should be dilated by use of the water bag until the os internum is effaced and the dilatation then completed by the manual method. An anesthetic being used or omited according to the severity of the pains. As a safeguard against the accumulation of blood in the uterus a firm abdominal binder may be applied. This is especially useful in marginal cases when after rupture of the membranes and the escape of the waters the foetus is driven down by the contractions and the presenting part partially or completely arrests the hemorrhage by pressure. This is a comparatively safe and conservative method, but unfortunately is only applicable to cases where the placenta encroaches but slightly upon the dilating zone of the uterus. The vaginal tampon is useful in cases where there is hemorrhage with little or no dilatation of the cervix. The tampon when properly placed generally accomplishes the work in ten or twelve hours and labor has progressed so far that the case can be managed by other means. Barnes' fiddle shaped dilating water bag is about the most efficient means employed for tamponing the cervix. Manual dilitation as advocated by Fornier is very dangerous, but must be resorted to in a large number of cases. Many have frightful hemorrhage in employing this method but quick work in clearing the uterus and by the use of large quantities of salt solution in the bowels and by hypodermoclysis may save the patient. No method has given better results in some cases than podalic version, as the foetus acts as a plug which is forced down or can be drawn down as the dilatation progresses. It must be borne in mind in any of these cases where much blood has been lost that violent interference, if employed at all, must be done with skill and rapidity. In most marginal cases of slight degree partial separation of the placenta from the dilating zone is all the treatment called for. This can be done with a sweep of the finger within the cervix. In cases of dead foetus or where it is not viable complete separation is advised by Simpson. This should only be done with good surroundings and by rapid and skillful hand. In cases of separation of a normally im-

planted placenta induced by concealed or external hemorrhage and caused usually by diseased decidua or placenta the same treatment is applicable as in placenta previa, because the woman is unsafe until the uterus is clear and firmly contracted.

The Virginia Medical Semi-Monthly, February 23rd, 1906.

A Case of Gastro-duodenastomy.—By Dr. J. S. Horsley, Richmond, Va.

Book Notices.

A Text-Book of Materia Medica, Therapeutics, and Pharmacology. By George F. Butler, Ph. G., M. D., Associate Professor of Therapeutics in the College of Physicians and Surgeons, Chicago. Fifth Edition, thoroughly revised by Smith Ely Jelliffe, M. D., Ph. D., Professor of Pharmacognosy and Instructor in Materia Medica and Therapeutics in Columbia University (College of Physicians and Surgeons), New York. Octavo of 694 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1906. Cloth, $4.00 net; Half Morocco, $5.00 net.

For this fifth edition Dr. Butler's textbook has been entirely remodeled, rewritten, and reset, bringing it in accord with the new (1905) Pharmacopeia. All obsolete matter has been eliminated, and special attention has been given to the toxicologic and therapeutic effects of the newer compounds. We notice with much satisfaction that the general arrangement of the book has been so changed that those drugs the predominant action of which is on one system of organs of the body are grouped together, thus suggesting their therapeutic as well as their pharmacologic, alliances. We believe this classification to be more thoroughly practical and useful than any other. By use of a more compact type the work has been reduced in size. It is a pleasure to us to recommend this book to the profession, for it is no donbt the most thorough, and in every way the best on the subjects it includes.

A Reference Handbook of the Diseases of Children. For Students and Practitioners. By Prof. Ferdinand Fruhwald, of Vienna. Edited, with additions, by Thompson S. Westcott, M. D., Associate Professor of Diseases of Children in the University of Pennsylvania. Octavo volume of 553 pages, with 176 illustrations. Philadelphia and London: W. B. Saunders Company, 1906. Cloth, $4.50 net; Half Morocco, $5.50 net.

To those of the medical profession who are acquainted with Professor Fruhwald's work in the original German, it is hardly necessary to speak of the extremely valuable service the W. B. Saunders Company has performed in presenting this English translation. It must be said, however, that the translation possesses an advantage over the original—though it be the work of a leader amongst leaders in pediatric knowledge—in that the editor, Dr. Westcott, has incorporated much valuable matter, the results of his own valuable experience. With a view to making it of special service as a practical reference book, the individual diseases have been arranged alphabetically, with numerous cross-references. This is a novel feature of untold value to the busy practitioner who wishes information quickly. Special consideration has been given to symptomatology, and the prophylactic, therapeutic, and dietetic treatments have been elaborately discussed; especially is therapy treated according to the latest discoveries. The illustrations are practical and therefore excellent, nearly all being reproductions of original photographs and drawings representing cases from Professor Fruhwald's own clinic. Indeed, we can foresee for this work the same great success in this country that it has achieved in Germany.

Nursing in the Acute Infectious Fevers. By George P. Paul, M. D., Assistant Visiting Physician and Adjunct Radiographer to the Samaritan Hospital, Troy, New York. 12mo of 200 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1906. Cloth, Price, $1.00 net.

It is evident to us that Dr. Paul has written his book on Fever Nursing especially for the nurse and with a knowledge of the subject that can have been gained only by intimate association with routine hospital work. The care and management of each fever has been accorded special attention, as these subjects are of particular interest to the nurse. The author has divided his work into three parts: The first treats of fevers in general; the second of each fever individually; the third deals with practical procedures and information necessary to the proper management of the various diseases discussed, such as antitoxins, bacteria, urine examination, poisons and their antidotes, enemata, topical applications, antiseptics, weights and measures, etc. Altogether, it will be found that Dr. Paul has rendered a valuable service, not only to the nursing but also to the medical profession, as much of the information given is not without the frequent needs of the general practitioner.

The Operating Room and the Patient. By Russell S. Fowler, M. D., Surgeon to

the German Hospital, Brooklyn, N. Y. Octavo of 172 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1906. Cloth, $2.00 net.

In Dr. Russell Fowler's admirable work we have a book that has long been needed, one that to our knowledge is unique in that it is the only work on the market devoted entirely to operative technic, with the preoperative procedures of sterilization and preparation. Written by a surgeon of rich clinical experience for the use of surgeons, nurses assisting at an operation, and hospital internes, it clearly describes the preparation of material of all kinds, indicates the instruments required for the various operations, details the preparation and care of the patient before and after operation, and the methods of anesthetization, describes and illustrates the position of the patient for different operations, and contains all other information a knowledge of which is necessary to produce the highest efficiency. Indeed, it is a most excellent and most valuable work for practical use, and the operating surgeon will find it of additional value as it furnishes him a guide to which he may readily add his own variations of technic.

Diseases of the Eye. A Handbook of Ophthalmic Practice. By G. E. deSchweinitz, M. D., Professor of Ophthalmology in the University of Pennsylvania. Fifth edition, revised and enlarged. Octavo of 894 pages, 313 text-cuts and 6 chromolithographic plates. Philadelphia and London: W. B. Saunders Company, 1906. Cloth, $5.00 net; Half Morocco, $6.00 net.

Dr. deSchweinitz's work on the eye is so well known that anything but a mere mention of the new edition seems superfluous. The success it has achieved is readily accounted for if one but glance through its contents. In this edition, enlarged by the addition of new matter to the extent of some one hundred pages, there have been added, amongst other subjects, chapters on the following: X-Ray Treatment of Epithelioma, Xeroderma Pigmentosum; Purulent Conjunctivitis of Young Girls; Jequiritol and Jequiritol Serum; X-Ray Treatment of Trachoma; Infected Marginal Ulcer; Keratitis Punctata Syphilitica; Uveitis and Its Varieties; Eye-ground Lesions of Hereditary Syphilis; Macular Atrophy of the Retina; Worth's Amblyoscope; Stovain; Alypin; Motais' Operation for Ptosis; Kuhnt-Muller's Operation for Ectropion; Haab's Method for Foreign Bodies; and Sweet's X-Ray Method of Localizing Foreign Bodies. Other chapters have been rewritten. The excellence of the illustrative feature has been maintained and thirty-three additional text-cuts have been added. Dr. deSchweinitz's work was long ago recognized as an authority and this new edition goes a long way in strengthening its reputation, if any strengthening be needed.

A Text-Book on the Practice of Gynecology. For Practitioners and Students. By W. Easterly Ashton, M. D., LL. D., Fellow of the American Gynecologic Society; Professor of Gynecology in the Medico-Chirurgical College of Philadelphia. Second Edition, Revised. Octavo of 1079 pages, with 1046 original line drawings. Philadelphia and London: W. B. Saunders Company, 1906. Cloth, $6.50 net; Half Morocco, $7.50 net.

The fact that two editions of Dr. Ashton's new work have been required in the short period of six months indicates beyond a doubt that the medical profession was quick to appreciate the practical merits of the book; indicates that the general practitioner wants a treatise on gynecology that does not assume him to be an expert gynecologist, but rather describes in detail, not only what should be done in every case and emergency, but also precisely how to do it. Owing to the short time that has elapsed since the appearance of the first edition, and also from the thorough manner in which Dr. Ashton handled his subject originally, the changes in this edition are necessarily few in number and limited chiefly to the correction of a few typographic errors and the alteration of several of the illustrations. In reviewing this new edition we cannot refrain from again speaking of the very practical illustrations. There are 1046 of them, all original line drawings made especially under Dr. Ashton's personal supervision, from actual apparatus, living models, dissections on the cadaver, and from the operative technics of other authors. All superfluous anatomic surroundings are eliminated and the operations and procedures are detailed step by step with a clearness and accuracy we have never before seen. Certainly, the success the work has won is well deserved and fully to have been expected.

A Treatise on Surgery. In two volumes. By George R. Fowler, M. D., Examiner in Surgery, Board of Medical Examiners of the Regents of the University of the State of New York; Emeritus Professor of Surgery in the New York Polyclinic, etc. Two imperial octavos of 725 pages each, with 888 text illustrations and 4 colored plates, all original. Philadelphia and London: W. B. Saunders Company, 1906. Per set: Cloth, $15.00 net; half morocco, $17.00 net.

We have been looking forward to the appearance of this work with the greatest ex-

pectations, for Dr. Fowler's endeavors in the field of practical surgery have been such as to stamp his writings with unquestionable authority. It is not too much, indeed, we feel it is too little to say that our expectations have been fully realized. The work is a masterpiece. It is an accurate, up-to-date treatise on surgery, skillfully presented. This entirely new work presents the science and art of surgery as it is practiced today. The first part of the work deals with general surgery, and embraces what is usually included under the head of principles of surgery. Special attention is given to the subject of inflammation from the surgeon's point of view, due consideration being accorded the influences of traumatism and bacterial infection as the predisposing and exciting causes of this condition. Then follow sections on the injuries and diseases of separate tissues, gunshot injuries, acute wound diseases, chronic surgical infections (including syphilis), tumors, surgical operations in general, foreign bodies, and bandaging. The second part of the work is really the clinical portion, devoted to regional surgery. Herein the author especially endeavors to emphasize those injuries and surgical diseases that are of the greatest importance, not only because of their frequency, but also because of the difficulty of diagnosis and the special care demanded in their treatment. Throughout special attention has been given to diagnosis, the section on laboratory aids being unusually excellent. The text is elaborately illustrated with entirely new and original illustrations, and evidently neither labor nor expense has been spared to bring this feature of the work up to the highest standard of artistic and practical excellence.

Differential Diagnosis and Treatment of Disease. By Augustus Caille, M. D., Professor of Diseases of Children, New York Post Graduate Medical School and Hospital, etc. With 228 Illustrations in the Text. New York and London: D. Appleton & Co., 1906. Cloth, 8vo. Pp. 867. $6 net.

The arrangement, the completeness and the value of the contents of this book at once place it among the standard volumes which should be in the library of every practitioner of medicine. It admirably fills a niche in the wants of every doctor. After an introductory section, it fully details the technique of diagnosis and laboratory aids to clinical diagnosis. A chapter is given to general therapeutic management, and one of over 140 pages to pediatrics. Ten consecutive chapters are devoted to the digestive system; four to the circulatory system; two to the respiratory system; three to the genito-urinary system; four to the osseous, muscular and articular systems; one to infectious and contagious diseases; one to diseases due to faulty metabolism, to faulty internal secretions, and to derangements of the ductless glands; the chapter on the nervous system and neurological memoranda covers nearly 10 pages. Then follow chapters on dermatological, otic and ophthalmic memoranda. The concluding chapter is on anesthesia, intoxications, miscellaneous ailments, keeping case records and accounts. If there is difficulty in thus finding reference to a subject treated of, the well arranged index of 28 double column pages will give the desired information.

Diseases of Infancy and Childhood. By L. Emmett Holt, M. D., Sc.D., LL.D. Professor of Diseases of Children in the College of Physicians and Surgeons (Columbia University), New York. Third Edition, Revised and Enlarged. Cloth. pp. 1174. New York: D. Appleton & Company, 1906.

The new edition of this standard textbook on diseases of children will be welcomed, although the previous edition was issued only three years ago. There is no specialty in the whole subject of medicine in which more rapid progress is being made than in the subject of Pediatrics. It becomes necessary for the author to make general revision of his book for each new edition. Dr. Holt's book is so familiar to the medical profession at large that a full review of the work is unnecessary; all that is needed is a note of the changes in this new edition.

The size of the volume practically remains unchanged—it contains seventy two more pages than the original edition, published in ninety-seven ('97); likewise there has been but little alteration in the general arrangement of the book. Some of the old illustrations have been removed, and at least twenty-five new and original pictures have been added. These are excellent and prove a most desirable addition.

Of the chapters which have been extensively revised may be mentioned the one on Hypertrophic Stenosis of the Pylorus. The author treats this subject, which until recently was seldom recognized, with the consideration due its importance.

Diarrhœal Diseases and Dysentery have necessarily been rewritten owing to the many advances made in these lines, especially as to the etiology.

We are glad to see the subject of Vaginitis dealt with in a positive way. This scourge of institutions for the care of infants, has never received from the general practitioner the attention commensurate with its importance. It is therefore necessary to bring it forcefully to his notice, and

that Dr. Holt has accomplished in this edition. Too rigid precautions cannot be enforced to prevent the entrance of cases of vulvo-vaginitis to Children's Hospitals. There is no doubt that the book is the best on the subject that has been written in this country for several years.

Helps and Hints in Nursing. By J. Q. Griffith, M. D., Ph. D. Family Edition. Cloth. Pp. 480. Price, $1.50 net. Philadelphia: John C. Winston Co.

This book is intended, the author states, for use in homes, as a guide in time of sickness, but as it includes, among other things, directions for administering general anesthetics—ether and chloroform—and for the production of local anesthesia by ethyl chlorid and by hypodermic injection of cocain, it certainly is not a book which ought to be put in untrained hands. "A little knowledge is a dangerous thing." The chapters on the nurse's relation to the patient, bed making and bed changing, bathing, preparation of food, method of making local applications and of administering medicines are practical and to be commended.

Counsels and Ideals. From the Writings of William Osler. Selected by C. N. B. Camac, M. D. Cloth. Pp. 277. New York: Houghton, Mifflin & Co. 1905.

Camac has made an excellent series of extracts from Osler's writings and the choice bits are very happily arranged. Some of the group headings are: "Pioneers in Medicine," "Honesty, Truth, Accuracy and Thoroughness in Medicine," "Patient Devotion to Duty and High Ideals," "Medical Education," "Value of Travel," and "Man's Years of Usefulness and How He May Prolong Them." A subject index adds to the value of the book for reference.

Case Teaching in Medicine. A series of Graduated exercises in the Differential Diagnosis, Prognosis and Treatment of Actual Cases of Disease. By Richard C. Cabot, A. B., M. D., (Harvard) Instructor in Medicine in the Harvard Medical School and Physician to out-patients at the Massachusetts General Hospital. Boston, U. S. A.: D. C. Heath & Co., Publishers. 1906. Price $1.50.

This book written by Dr. Cabot entitled "Case Teaching in Medicine," giving the Differential Diagnosis and Prognosis in Treatment of Actual Cases. It is well arranged and it seems to us to have many advantages. It represents a plan of teaching medicine which has been well tried by the author and many other eminent teachers and they have found it successful. The introduction describes Dr. Cabot's plan. The book is well indexed. It has three complete indexes. The book is published in the teachers' and physicians' edition and the students' edition. The Students' edition does not contain the answers to the questions. The book has 220 pages and is nicely gotten up.

It is within bounds to say that "The Phantom of the Poles," by William Reed, to be published next month by Walter S. Rockey Co., New York, will start a train of thought hitherto unawakened and inert. Advance sheets demonstrate that the book is replete with progressive ideas, sensible theories, analytical workings, and logical deductions, all of which can be read with profit whether one wholly agrees with the author or not. But that Mr. Reed has been vouchsafed an apocalytic vision of the illusive North Pole or that his deductions and claims are to be overwhelmingly refuted and disproved remain so to be seen. Price $1.50.

A Railroad and a Man.

In the April Lippincott's Magazine Samuel Merwin, the author of "Calumet K," contributes a novelette on a subject of paramount interest nowadays: The Individual against the Corporation. In Mr. Merwin's story there is a real man not afraid to speak his mind nor to carry out his threats, regardless of cost. Part of the charm of the story lies in the softer side of this man's character, which is swayed by a woman's influence. Its scene is placed in a growing Western city, where a young civil engineer off on a vacation happens upon a peculiar land charter and sees into the ostensibly innocent purpose of a big railroad in closing up a canal. His fighting blood is roused; he resigns his position with the corporation, and the fight is on. Out of this the author makes a tale of action that carries the reader along with breathless interest to the last line.

Abstracts of the Leading Articles of the Month.

Trigeminal Neuralgia, Surgical Treatment, Illustrated.

Trifacial neuralgia is one of the most desperate conditions that does not terminate in death that the surgeon is called upon to relieve.

Its etiology and pathology remain unknown but the change in posture (from bipedal to quadrupedal) is probably a factor in its causation.

The technique of each operation is given in detail together with the bibliography of

1. Neurectomy and neurotomy.
2. Ligation of carotid arteries.
3. Removal of the Gasserian Ganglion.

Neurotomy, neurectomy and the injection of osmic acid accomplish the same purpose, giving relief but for a short time, when regeneration will be established.

Thiersch says that regeneration will occur after 5 cm have been removed. The effect of osmic acid injected into the nerve is the same as constricting the nerve with a ligature. The nerve tissue becomes hardened but regeneration will occur.

Avulsion as practiced by LaPlace absolutely prevents regeneration. The nerve is divided as it emerges from its foramen, the body grasped with forceps and twisted slowly from right to left and left to right until the body, together with its filaments, is removed.

Lexer's method (a modification of Kronlein's) is as follows:

1. Cut flap within lines indicated.
2. Divide zygoma with saw at each extremity.
3. Cut away malar arch with chisel.
4. Retract flap and remove zygoma.
5. Detach soft tissues to infra-orbital crest.
6. Separate origin of external pterygoid.
7. Base of skull and foramen ovale now exposed.
8. Divide third branch at exit.
9. Ligate middle meningeal artery and vein.
10. Tampon for bleeding from pterygoid venous plexus.
11. Remove second and first branches also if necessary.

After division of the nerves at their point of exit, avulsion is practiced similar to the method of LaPlace.

Lexer and VanHook each report several cases done in this way.

The inferior dental nerve may be removed by incising the soft tissues over the inferior maxillary, retracting the parts and drilling to the posterior dental foramen. If necessary the jaw may be channeled as far forward as the anterior dental foramen. The nerve may be avulsed without channeling, after dividing it as it enters and makes its exit from the jaw, by grasping it with a pair of forceps which have been passed through the opening at the posterior dental foramen.

Neurectomy as practiced by Langenbeck is one of the most effectual methods because next to Lexer's it entails the destruction of more nerve tissue. It has long been practiced, however, only by a few, owing to the want of skill and courage. It requires more skill than even the method of Lexer.

Ligation of the common and external carotid arteries above the occipital and facial branches for trifacial neuralgia has been done by Hutchinson, 1885, Fowler, 1896, and Ricketts, 1896, resulting in much relief from pain.

It is probably an operation that should be combined with neurotomy, neurectomy, injection of osmic acid or the partial removal of the ganglion. Gross, 1885, combined it with neurectomy.

The nerves originating in the ganglion of Gassa being both sensory and motor renders them doubly difficult to deal with. The total destruction of the ganglion results in the loss of sensation and more or less motion, some of which is exceedingly undesirable.

Complete removal of the ganglion probably results in greater mortality than partial removal and the loss of sensation proportionate to the amount of its destruction.

Mortality in either complete or incomplete removal of the ganglion is influenced by the amount of time, trauma, anaesthetic, hemorrhage and shock.

Horsely, 1891; Rose-Andrews, 1892; Hartley Krouse, 1892; Doyen, 1894; Cushing, 1900; and Kronlein, 1904; have each given technique for the removal of the ganglion that give immunity and mortality varying in degree.

Preference has been given to the Hartley-Krouse method, but even this has given an unreasonable mortality (25% to 30%). This alone should be sufficient cause for its discontinuance.

Kronlein's method is the second choice, having given less mortality than the Hartley-Krouse operation.

However, all intracranial operations devised for the removal of the Gasserian ganglion necessitate so much trauma to the smaller nerves not associated with pain from the fifth that destruction of the ganglion should be discontinued until methods with less trauma and mortality can be devised.

Kronlein's intracranial method is a continuation of the Lexer modification after the skull and foramen ovale have been exposed.

1. Skull opened by chisel or drill.
2. Enlarge opening to foramen ovale with forceps.
3. Introduce finger to dura.
4. Push dura to foramen ovale.
5. Third nerve now seen inside of skull.
6. Raise body to semi-sitting posture.
7. Wait until cerebral fluid gravitates into spinal canal.
8. Dissect away gang ion.

Unpleasant Consequences.

1. Injury to the motor root of the fifth nerve, paralyzing the muscles of mastication.

2. Paralysis of the buccinator, while never complete, results in more or less

ankylosis due to (Quenue) trophic changes and contraction of the temporal and masseter muscles.

3. Complete corneal and conjunctival anaesthesia, resulting in ulceration, opacity and softening of cornea. (Cause not known, but trauma and infection suspected). Injury to superficial petrosal nerve also suspected.

4. Ptosis which is due to injury to third, fourth and sixth nerve.

5. More or less loss of hearing resulting from paralysis to tensor tympani due to injury to the motor root of the fifth or to edema of tympanic membrane.

Conclusions.—Operations in order of their selection.

1. Avulsion of the distal branches.

2. Avulsion with ligation of common and external carotid arteries.

3. Removal of the branches of the nerve (Lexer).

4. Lexer's method combined with that of LaPlace.

5. Lexer's method combined with that of LaPlace and ligation of the common and external carotid arteries.

6. Removal of the ganglion and neurectomy of the distal branches.

7. Removal of the ganglion combined with neurectomy and ligation of the common and external carotid arteries.

8. Neurotomy, neurectomy, or the injection of osmic acid gives only temporary relief.

9. Plugging the foraminae with fragments of bone cut from the neighboring plate will prevent regeneration of the nerves passing through them.

10. The method of Kronlein is an innovation, having given better results with less deformity, mortality, loss of time, motor paralysis and less risk of loss of vision.

11. Relapse occasionally occurs after intracranial operations, but in such cases removal of the ganglion is supposed to have been incomplete.

12. All intracranial operations for the removal of the ganglion should be abandoned because of the high mortality, if for no other reason.—Abstract of a paper read at the recent meeting of the Tri-State Medical Association of the Carolinas and Virginia.—Benjamin Merrill Ricketts, M. D., Cincinnatti.

Cessation of Epilepsy after Removal of Adenoids.

Thomson (The London Practitioner) reports the case of a child, aged 6, that was sent to the writer, with the following note: "She is under my care for petit mal, but she is getting deaf, and there are signs of some throat affection—probably adenoids. I am sure the epilepsy will also be benefited by the removal of this discomfort." She had been subject to fits from the age of 4. Two attacks of petit mal occurred during her visit to the writer, within twenty minutes. During these the head was thrown back, the eyes turned up, the upper eyelids twitched, and inspiration was shallow and noisy. Each attack lasted only a few seconds, and the patient recovered consciousness without falling from the chair. She was said to have caught cold a month or two previously, and had since been deaf and a mouth-breather. She was also reported to be restless in bed, talking in her sleep and throwing off the clothes. There was no enuresis. The child had a well-marked adenoid facies. She was a constant mouth-breather, the root of the nose was very broad; and the inner folds of each upper eyelid, which by some is thought to be accentuated with adenoids, was well marked. She was said to have a dry nose, and anteriorly the nostrils appeared normal. The molar teeth had not fallen, but the palate appeared a little arched. She was so deaf that whispered speech was heard only at 2 yards. The membranae tympani were very translucent, only slightly retracted, and the pink injection of the inner tympanic wall was easily visible, shining through the drum membrane. In children this appearance is characteristic of Eustachian and middle-ear catarrh from adenoids, and, with digital examination, these growths were found to be plentiful. There were no palatine tonsils. A large mass of adenoids was removed on Aug. 25, 1898. On Sept. 7 the patient had ceased to be a mouth-breather, the membranae tympani no longer were pink, and she heard a whisper at 4 yards. She was reported to sleep quietly and to be much brighter, but the fits still continued. In March, 1902, the parents reported that the fits had ceased within a few months of the operation, and had not recurred. She was a bright, intelligent girl of 12, weighing 6 stone 8 lb.—i.e. 16 lb. above the average. She was no longer a mouth-breather and had no trace of adenoids, and her hearing was perfect. There was no marked arching of the hard palate. For a few months after the operation she took bromide. She is now nearly 13 and has had no fits for 7 years. In other cases in which the writer has removed adenoids the result has not been so satisfactory. But the most unsatisfactory cases of epilepsy are those which begin before the age of 10.

Gelatin in Diarrhea.

Mann and Herzberg (Therapie der Gegenwart) report excellent results from the treatment of diarrhea with fluid gelatin. A 10-per-cent. solution in distilled water is boiled for six hours and then filtered. This

solution will keep for some days. Herzberg for some time has given calves' feet as a soup (1 pound to 1 quart of water boiled down to 1 pint) in the treatment of the diarrheas of children and in typhoid. Tubercular lesions do not yield to this treatment.

Nervous Manifestation in Rheumatism.

Poynton and Paine (The London Medical Lancet) conclude an article as follows:

1. There is a great infective process, the rheumatic, to be placed among that series in which the staphylococcus, streptococcus, pneumococcus, and gonococcus are to be found. The infective agent is a diplococcus, with, in all probability, some peculiar characteristics.

2. Eventually rheumatic chorea will prove to be a local infection of the nervous system, and most of its symptoms to be the result of a slight meningoencephalitis and possibly meningomyelitis. The authors' reasons for this belief are: (a) They have isolated and cultivated the diplococcus from the spinal fluid in four cases of fatal rheumatism, in three of which there was chorea at the time of death; (b) they have produced twitching movements, arthritis, endocarditis, and pericarditis by intravenous injections of the diplococcus into rabbits; (c) they have demonstrated them in the brain and pia mater of the rabbits that had shown the twitching movements.

3, In rheumatic hyperpyrexia no gross macroscopical lesion is found; it is probably an acute rheumatic toxemia, in contrast to the multiple and slight local lesions which exist in chorea.

Convulsions in Children.

Cautley (Clinical London Journal) makes the following suggestions as to treatment: As soon as a fit starts the child should be laid down with the head a little raised, and the clothes loosened or removed. Avoid all disturbance. A bath at 95 degrees to 100 degrees F. may be given, especially in cases due to colic, but not in fits due to syncope or collapse of the lung. Cold affusions should be applied to the head while in the bath. Chloroform is given to allay the spasms, and the alimentary tract is treated. The large intestine may be irrigated with saline solution or a glycerin enema given. After the bowels act, chloral hydrate gr. iii-x, according to age, should be given by rectum. Double the quantity of potassium bromide may be combined with this. Repeat the chloral in an hour if necessary. If it is not retained, morphine gr. 1-20 may be given hypodermically to a child of six months, repeated in an hour if needed. Chloroform is given until the chloral begins to act. If there is evidence of unsuitable food in the stomach induce vomiting by tickling the fauces. Calomel should be given as soon as the child can swallow. Do not give emetics at this stage, as vomiting may induce another fit. Lancing the gums may prove beneficial as a mode of bleeding if there is cerebral congestion, due to asphyxia. Leeches are of use in uremia in older children, but children do not stand bleeding well. Active treatment can be discontinued when the secretion of urine becomes abundant. After the attack the child must be kept quiet for a few days, on light diet, the bowels regulated, and moderate doses of bromide given, combined with chloral, if necessary, or urethan instead. Belladonna and valerianate of zinc may be combined with bromides. When there is a definite disease this should be treated, and all sources of reflex irritation should be attended to. The drugs most useful in the prevention of infantile convulsions are cod-liver oil, malt and iron, acting by improving the general condition. For epilepsy in older children the bromides should be given for at least two years, and may be combined with salt starvation. Constipation must be remedied, intestinal antiseptics given if necessary, and the diet be plain and unseasoned, and contain little meat. Out-door life with physical exercise is best.

Pathology of Paroxysmal Haemoglobinuria.

Eason (The Edinburgh Medical Journal) concludes a very valuable article as follows:

1. A pathological substance is present in the blood serum and lymph of individuals affected with paroxysmal hæmeoglobinuria.

2. This substance can dissolve (in vitro) the corpuscles of the affected individual (autolysis) and also those of normal individuals (isolysis), provided suitable conditions as to temperature exist.

3. Temperature conditions require to be further studied; it is, however, apparent that a temperature much below that of the body favors the action of the hæmolytic substance, while the normal body temperature retards or prevents it.

4. My observations regarding phagocyte activity during the hæmolysis (in vitro) correspond with those made by Levaditi, Savtchenko, Gruber, and Ruziczka, in their comparative work on immunity.

5. These authors consider that the excessive phagocytic action, observed by them, is significant of the antecedent union of intermediary body with the red corpuscles. "The Ruziczka phenomenon" is constantly observed during the autolysis and isolysis of red corpuscles produced by the serum of paroxysmal hæmoglobinuria cases. Therefore the probable explanation of the hæmolysis is the union of intermediary body and red corpuscles.

6. The intermediary body of paroxysmal hæmoglobinuria, however, cannot of itself produce solution of red corpuscles. For this, the presence of a thermo labile substance complement is also required.

7. The changes observed in the red cells in course of solution correspond with those produced during hæmolysis by an immune serum as described by Gruber.

8. The serum of normal individuals does not cause hæmolysis. The serum of various individuals suffering from disease produced little and generally no hæmolysis.

Snakebite, Permanganate of Potash For.

Rogers, in the Indian Medical Gazette, reports twelve cases of snakebite that were treated by the writer with potassium permanganate, according to the method proposed by Lauder Brunton. In four cases the treatment was commenced at once; in three cases a full half-hour elapsed before it was commenced, but in two of these a ligature had been applied shortly after the infliction of the bite. In three other cases three-quarters of an hour, one hour and four hours respectively elapsed before treatment was begun, but it still proved successful in saving the life of the patient. Only two of the twelve patients died. In the majority of cases the snake inflicting the wound was a cobra. The two patients who died did not come for treatment until nine and eleven hours respectively after having been bitten.

Salicylate of Iron.

Gray (Edenburgh Medical Journal) says that this salt has been found by the writer to act as a powerful febrifuge without producing diaphoresis. In fifty cases of erysipelas the first or second local application was followed by a fall in temperature and cure in about thirty-six hours. The mixture employed consisted of one drachm of soda salicylate dissolved in two ounces of water. To this was added two drachms of tincture of potash, half an ounce of glycerin, and water to make eight ounces. Of this mixture two tablespoonfuls were given every three or four hours. In two hundred and fifty cases of tonsillitis similar rapid results were obtained. Iodine in weak solution was gargled, while the tincture was applied externally, in addition to the use of the salicylate. It was also effective in croupus pneumonia, in puerperal sepsis, and in various other inflammatory conditions.

Hysterical Torticollis.

Kollarits (Aus der neurol. klinik von Prof. Jendrassik. Orvosi Hetilap) gives a full history of three patients, in all of whom there was faulty heredity, combined with the influence of psychical factors. In the first case it was a tremor of the head; in the second paresthesias of the neck, and in the third a traumatism of the neck, which directed the attention of the previously hypochondrial patients to the region of the neck. In neither of the cases did the convulsion remain limited to the accessories alone, nor to one individual muscle; each case constituting a spastic attitude of the head, shoulder, or trunk, resulting from associated movements. Each one of the patients possessed some device to diminish the convulsion. There were no movements at all during sleep. One case only was improved to a considerable extent.

Conclusions: Every case of spastic torticollis consisting of tonic or clonic convulsions is to be designated as Torticollis Mentalis. This mental torticollis is a side phenomenon of hysteria, and may exist without further hysterical signs, as a monosymptomatic hysteria. The treatment of this hysterical symptom can only be by suggestion. Surgical interference is injurious.

Pelvic Suppuration, Treatment of.

Worrall in the British Gyn. Journal says that in all cases in which it is evident from the symptoms and physical signs that pus exists in the pelvis, the treatment should be operative. When the patient is desperately ill, the operation should take place without a moment's delay. When it appears probable, after a careful examination and weighing of all the factors in the case, that the patient, although seriously ill, is likely to improve with rest and supporting measures, the operation may be postponed until the symptoms have subsided and the temperature becomes normal. The opening of the abdominal cavity should always be preceded by curettage at the same sitting.

The abdominal cavity should always be opened first through the posterior vaginal fornix. If serious constitutional symptoms are present at the time of operation, and if pus can be evacuated from the pouch of Douglas, or from pus sacs within reach of the finger, and if bimanual examination discloses no other collection which might be responsible for such constitutional symptoms, the pelvis should be thoroughly cleansed, powdered with iodoform, and the pus sacs lightly packed with gauze. In a week the patient's condition will usually be so much improved as to allow of abdominal section in the middle line and the removal of the pus sacs.

If, on the other hand, there are no constitutional symptoms, or these are but slight, or if, again, it be impossible to reach and evacuate the pus from the presence of which constitutional symptoms have arisen, then the final step of median abdominal section should be undertaken at the same sitting, and the pus sacs completely removed.

If the uterus appears to be involved in the septic process, it also should be removed. The same rule applies to the appendix vermiformis. Flushing should not be practiced unless there is general purulent peritonitis. The pelvis should be carefully cleared by gauze swabs and lightly powdered with iodoform. Every case should be drained by a single strip of gauze two inches wide carried from the pelvis into the vagina.

Asthma.

Morrison in the London Lancet calls attention to the fact that the phenomena of asthma are those of exaggerated breathing, but with this difference: that the importance of all the adjuvant mechanism of respiration fails to produce that fuller and easier breathing toward which all the powers of the patient are bent. There is a very large increase in the relative amount of residual air in the chest, due to impeded escape of air. It is quite probable that the obstacle to the egress of air may be largely relative, the preponderantly active muscles of inspiration overpowering the weaker expiratory act. It is possible, however, that tumefaction of the mucous lining of the tubes may cause actual narrowing.

It is well known that the effect of drugs in asthma is most variable; depressant remedies most certainly relieve the spasm and allow of sufficient expiration to reduce the rigid inspiratory fixation. The author's idea is to accomplish this mechanically—i.e., to aid the expiratory efforts in their struggle with inspiration. The writer first tried the following method with success in two adolescent cases. With one hand on the back and one on the front of the chest, it was emptied with a prolonged wheeze at the end of each inspiration. During inspiration the hands were raised from the chest. The patients expressed relief from the sense of strain and stifliug. During the last two years he has frequently tested the utility of artificial expiration in the attack of spasmodic asthma, and has never failed to give relief.

Caesarean Section.

Olshausen (Zentrbl. f. Gyn.) gives the results of his extensive experience with Caesarean sections. To his first report of eighty cases published in 1902 he can now add thirty-eight additional cases, making a total of one hundred and eighteen in all. The indications for the operation were as follows: contracted pelvis, 91 cases; eclampsia, 7 cases; myoma, 6; carcinoma uteri, 4; vaginal fixation, 4; nephritis, 2; heart disease, 2; scars in cervix or vagina, 2.

He discusses the indications in the treatment of eclampsia. Only in certain well-defined cases he advises a Caesarean section. They are the ones in which strong convulsions and a condition of severe intoxication precede the onset of any labor pains. Either a vaginal or abdominal Caesarean section is indicated in these cases. Of his seven abdominal operations for this indication, death occurred in two cases as a result of the eclampsia within two days after operation. Since 1904 Olshausen has also done twelve vaginal Caesarean sections for eclampsia with three deaths. In all three the operation was not responsible for the exitus.

In the technique of Caesarean section it is most important to avoid the placenta. This can as a rule be done if certain precautions are observed. The abdominal incision is made very high and the uterus pulled out of the abdomen. Careful inspection as to bulging and venous congestion will usually make the placental site easily recognizable. If the incision is made sagittally in the fundus, it can be extended in either direction, anteriorly or posteriorly, depending on the location of the placenta. The course of the round ligaments is so uncertain as no longer to deserve special note.

To avoid hæmorrhage, Olshausen recommends the hypodermic injection of 0.12 gramme (two grains) of ergotin hypodermically twenty minutes before the operation. Formerly he had injected it at the onset of the operation or even ten minutes before, but had found that the effect of the drug was not observed until considerably later, when the operation was nearing conclusion. No bad effects from the early use of ergotin were noted in the child. For suture material in the uterus silk has been abandoned in place of catgut sterilized in alcoholic acid solution.

In seven women the section was done twice; in two women, three times, and in three women four times. These twelve women recovered from their thirty-two operations without any mortality.

Out of ninety-one sections made on account of contracted pelvis there were nine deaths (mortality ten per cent.).

Cervical Tears in Primiparae.

Scheurer (Archiv. f. Gynaek.) finds the percentage of cervical tears in primiparae very high. In about one-fourth of all cases there was a tear extending half-way up to the vaginal fornix. Only rarely, however—that is, in three per cent. of the women—did the tear extend up to the supravaginal portion of the cervix. A practically intact cervix was found in but five per cent. of the cases.

As etiologic factors the most important are obstetrical operations of one sort or another. In more than half of the cases in which severe tears occurred, there had been performed some operative manipulation,

Other factors in the etiology were the size of the child and the age of the mother. The greater the age of the primiparous women, the greater the chance for a tear.

The site of the tear is almost always a lateral one and apparently right sided tears are somewhat more frequent and severe than left sided ones. Even severe tears may give rise to slight or no bleeding nor was any harmful influence exerted by them on the morbidity of the puerperium or the involution of the uterus.

The writer bases his conclusions on 99 primiparae examined with special care and thoroughness.

Carcinoma.

Bradshaw (British Medical Journal) says that it is parasitic, not in the ordinary sense of infective, but in the sense of one organ living at the expense of another. Carcinoma depends on the growth and reproduction of its own cells, and is not a change in neighboring cells. The framework of carcinoma is derived from the connective tissue of the part in which the carcinoma grows. It is a simple form of animal life. Reproduction takes place by mitosis and by amitosis, and the conjugation of neuclei has been observed in carcinoma of the highest as well as of the lowest animals. Cancer cells are tenacious of life. Cancer locates in certain tissues and organs which are suited to the support of the cancer cell. Cancer is not inherited, but rather the tissues and organs which favor its growth are inherited. Age gives susceptibility to cancer, but not dwelling, climate or soil. The evidence that cancer is parasitic is the following: It first appears on the surface of the body. Its liabity to occur in certain districts suggest it as a parasite from outside the body. The opposing evidence is that the carcinoma cell corresponds to the character of the epithelium of the part in which it first occurs; squamous carcinoma corresponds to squamous epithelium; columnar to columnar, and spheroidol to spheroidol types. The stroma of the three types of growth is peculiar to that type, with certain limitations, and is not common to all three. While the tissues of the young are suited to the growth of cancer cells it is essentially a disease of advanced life.

Speedy Treatment for Lumbago.

Kenyon (British Medical Journal) says that the usual method of treating lumbago is uncertain and mostly unsatisfactory. He suggests a simple, certain, and speedy mode of treating this painful affection, which he has used for many years and never known to fail. It consists in the local application of tartarated antimony. This is most easily effected by thoroughly rubbing into the painful part unguentum antimonii tartarati B.P., twice a day until the pustules characteristic of antimony make their appearance. By this time the pain is greatly relieved if not quite gone, and the patient is practically well. Along with this local treatment it is advisable to administer a saline aperient mixture containing sodium salicylate. The number of applications of the ointment required depends greatly on the thoroughness with which it is rubbed in. If this is well done one or two applications are usually sufficient. It is prudent to warn the patient not to continue having the ointment rubbed in longer than necessary to relieve the pain, or after a fair crop of pustules have come out, as this makes the skin unnecessarily sore and ulcerated; also not to let the ointment be used for any other purpose.

Spray of Resorcin in Common Colds.

Welsford (British Medical Journal) is of opinion that the obvious line of treatment of common colds in the head is to spray the nasal passages with an effective antiseptic, and the difficulty has been to find one which is not only efficient but is also sedative to the mucous membrane. The author finds such an antiseptic in resorcin, having used it upon himself for a considerable time, and also prescribed it freely with results most favorable. In his own case it relieved a most troublesome hypetrophic rhinitis, with which he had been troubled for years, and the nasal catarrhs which used to attack him with unfailing regularity whenever he had the misfortune to approach any one afflicted with a cold have been conspicuous by their absence. Similarly good results have been reported to him by patients, and the drug appears worthy of a more extended trial. The best mode of employing resorcin is as a spray. A watery solution of about 5 grn. or more to the ounce is used combined with a little alkali. Tablets for nasal irrigation are made by the leading pharmaceutical firms, which contain bicarbonate of sodium and common salt, together with menthol, or thymol and oil of winter-green. One of these tablets should be crushed and added to the resorcin solution to the strength required. The solution should be sprayed up the nasal passages freely regularly as a morning and evening duty, and the spray should be used very freely whenever a cold threatens.

The Enlarged Prostate.

Wallace (The London Medical Practitioner) considers the organ from the points of view of comparative anatomy and function, traces its development and growth in man, considers its external characteristics,

and histological make-up, and finally the nature and sequelæ of enlargement. After discussing at length the six or eight popular theories which attempt to explain the cause of prostatic hypertrophy, Wallace states his own opinion to be that the process is an adenomatous one. Symptomatology is carefully and minutely considered, the physical basis of every symptom being clearly elucidated.

The various methods of operation are considered, he states that his own preference is for suprapubic enucleation. The ultimate results of this operation he describes as "exceedingly gratifying."

Spinal Anaesthesia.

Freund (Cent. f. Gynaek.) reports the results with spinal anæsthesia. To induce anæsthesia, from 6 to 7 centigrammes of stovaine are injected into the spinal canal, and the patient is then put into the Trendelenberg position for about five minutes. Anæsthesia is usually complete in from five to ten minutes and lasts for from one and one-quarter to two hours. Under this anæsthesia both pelvic and abdominal operations have been performed. He says "The results have been so absolutely favorable, that we have come to consider spinal anæsthesia as indispensable, in those cases where a radical abdominal hysterectomy must be performed in a debilitated or very cachectic subject. . . . . The stovaine-suprarenin mixture permits of the performance of severe abdominal operations, without pain or detriment to the patient and without in any way hindering the operator.

Typhoid Fever, Peritonitis In.

Macrae, in the Glasgow Medical Journal, states unhesitatingly that by far the most important sign of the onset of acute peritonitis in a case of enteric fever is a sudden marked alteration in the general aspect of the patient, the appearance either of the typical Hippocratic facies, or a close approximation to it. Next in importance he places the presence of rigidity of the abdominal wall, with the associated abolition of movement of the abdominal wall on deep inspiration. Third comes the gradual increase of the pulse-rate, particularly if with the onset of symptoms there has been a sudden rise followed by a slight fall, and this again succeeded by a gradual progressive increase in the rate.

Nutritive Enemata.

Strauss (Berliner klinische Wochenschrift) reports his observations relative to the absorption of albumin and fat from the rectum. The albuminoid preparation employed was calodal, which he had formerly employed subcutaneously and found that it was not followed by excretion of albumin in the urine. In addition a small quantity of a saline emulsified preparation of fat and grape-sugar was used. For each enema 1 liter of water, 25 grammes of calodal, 50 grammes of grape-sugar, and 50 grammes of saline, together with as much salt as could be taken up on the tip of a knife, and 0.2 gramme of menthol or 0.5 gramme of thymol or 1 gramme of salicylic acid, were employed. If the feces began to smell sour a small quantity of sodium bicarbonate was added. In a few cases five or ten drops of laudanum was also added. The enemata were given once or twice a day, at a height of 25 to 30 centimeters. A tampon-tube was employed, and a device also constructed to make the fluid flow only drop by drop. In this manner about an hour was required for the entire enema to flow into the rectum. In the majority of the fifty cases reported the enema was retained between three and four hours, and less than half of it was expelled. In a few cases the entire quantity was retained.

Abdominal pain was only exceptionally experienced, nor was there irritation of the rectum except in two instances, in which the enemata were continued for twelve and fourteen weeks respectively.

No exact data were obtainable in regard to the amount of albumin absorbed, although some very interesting physiological tests were made. Strauss is convinced, however, that this form of enema and the method of administering it constitute a better method of rectal alimentation than is usually employed.

Some investigations relative to the precipitin content of the blood were also conducted after rectal feeding with milk and eggs, but the results obtained were negative.

Scopolamine in Obstetrics.

Laureudeau (L'Union Medicale du Canada) has employed scopolamine for the relief of the severe pain attendant on childbirth, and believes that when the suffering incident to this is prolonged for more than an hour, and is severe, scopolamine is the best drug to use. In case of need he repeats the dose at intervals of three to six hours. The patients awake after an almost continuous sleep of twelve to eighteen hours, cheerful, normal, and content. He has thus treated fifteen cases without complication on the side of the mother, though possibly the period of expulsion was somewhat retarded. Dilatation of the neck of the uterus seemed to be rather favored by this modern anesthetic. The results were not quite so satisfactory from the standpoint of the child. It was noted that the latter seemed stupid. In one out of four cases artificial respiration was needful before this function became

established, and moreover sudden motions were more efficient in attaining this end than rhythmic traction on the tongue and other well known methods of respiration. The pupils of these children were slightly dilated. The sleep in which these children were born did not last more than one hour. The drug used was bromohydrate of scopolamine in doses of 1-50 grain hypodermically, associated with morphine sulphate 1-5 grain.

It is worthy of observation that Laureudeau states that in all the cases in which he used scopolamine he employed forceps or version, and during the operative act he supplemented this drug by the use of a few drops of chloroform.

The Balneologic Treatment of Old Hemiplegias.

Neumann (Therapeutische Monatshefte) reviews the methods of treatment practiced in hemiplegia, and states that in a certain percentage of cases, probably from thirty to forty, improvement both as to general condition and contractures may be obtained by the use of properly regulated bathing cures. The best results are obtained by baths at a temperature of 25 degrees to 26 degrees R., and those whose composition is practically the same as that of normal saline solution are to be preferred. The duration of the bath should be from eight to twenty minutes, and it should be followed by several hours' rest in bed in order that the slowing of the pulse following it may be maintained. Zander's gymnastic exercises are considered to be a valuable auxiliary in the treatment of contractures.

Experimental Decapsulation of the Kidney.

Martin (Archiv fur klinische Chirurgie) says that the collateral circulation is much freer after this operation, specially good results being obtained if the kidney was placed inside the peritoneum or attached to the omentum. The renal vein or artery may be safely ligated several weeks after decapsulation, though not before. The veins may even be tied on both sides at once, although normally this is always fatal. The same is true of ligation of artery and vein of one kidney. The author gives detailed reports of microscopic studies, which show that although the new-formed capsular is denser if the perirenal fat is removed the vascular conditions are no better.

Prostatectomy.

Loumeau (Annales des Maladies des Organes Genito-Urinaires) has performed 29 perineal prostatectomies and 10 suprapubic operations; 27 of the 29 were done by morcellement, 2 by enucleation. There were no operative deaths, though one case died of hemorrhage and congestion of the lungs thirteen hours after the operation. Of the 28 operative cures, 15 completely recovered the power of urination and had no complications of any kind. One died in two years from septicemia incident to a persistent urointestinal fistula accompanied by the recurrent production of vesical calculi. Of the remaining 12, 2 had wounds of the rectum which were immediately sutured without further incident; 4 others presented urethrorectal fistula; 3 recurrent urethroperineal fistula; 3 weakness of the compressor urethræ muscle, giving feeble control over the urine; 1 severe phlebitis involving both legs, together with urethrorectal fistula. Three of the cases still presented the power of erection, 15 had lost it since operation, 9 others lost it before operation and had no improvement afterward.

Of the 10 suprapubic prostatectomies 3 were partial; of the 7 total operations 1 died in nine days. The other cases recovered without accident or complication, and two of them (seventy-seven and eighty-two years old respectively) who had erections before operation still preserved them. He concludes that the suprapubic operation is the one of choice. He strongly urges that very large drainage-tubes should be employed.

On the Treatment of Puerperal Eclampsia.

Roger de la Harpe (Jour. of Ob. and Gyn. of Brit. Emp.) says that induction of labor is never performed, nor is labor counted on in this treatment. The only intervention permissible locally (and this only in very exceptional cases) is the application of forceps, the head being on the vulva.

The chief feature of the Rotunda treatment referred to in the article is the administration of morphia in heroic doses. Half a grain is given hypodermically, and repeated, if necessary, in a dose of a quarter of a grain every two hours, up to a maximum total of two grains in 24 hours. The elimination of toxic material is propagated by washing of the stomach, and introduction of fluid through the stomach tube and into the rectum. He lays special stress upon the necessity of keeping the patient continuously on her side in order to prevent foreign bodies from entering the trachea and so causing pulmonary edema and its sequences.

The fact that in the Rotunda Hospital the mortality of eclampsia is 16.9 per cent. proves conclusively that this is the best mode of treatment of puerperal eclampsia.

Sir Arthur Macan when discussing this paper pointed out the fact that the profession almost universally recognized that the termination of labor was a very important

point in the treatment; the use of dilators, of Cesarian section, etc., all pointing to a belief in the efficacy of delivering the woman, and to a non-belief in the efficacy of the morphia treatment.

Cocaine and Adrenalin-Cocaine Anesthesia.

Sikemeier (Archiv fur klinische Chirurgie) says that contrary to some recent teaching, adrenalin, injected with, or even before, cocaine does not lessen its toxic action. Similar doses with and without adrenalin had the same effect, and the fatal dose was the same also. The effect of the cocaine was not at all increased by the addition of adrenalin, and just as much cocaine was required if adrenalin was added as without it. The anemia produced by the adrenalin is, however, a great advantage, and it should always be used when hemorrhage is feared. The increase of medullary anesthesia by the addition of adrenalin is due to the anemia of the cord, which in itself produces anesthesia of the limbs. Zeigon showed that adrenalin alone injected beneath the dura produced this effect.

Alypin in Rhino-Laryngological Practice.

Finder (Berliner Klinische Wochenschrift) has been experimenting with alypin, a glycerine product, as a substitute for cocaine. Alypin is placed on the market by Friedr. Bayer and Co., of Elberfeld, Germany, as a white, crystaline powder, which is readily soluble in water and is of neutral reaction. It is claimed that it is 2 to 3 times less toxic than cocaine. In contradistinction to cocaine it is a vaso-dilator, which makes it a very valuable anesthetic in certain operations in the nose. He states that alypin in 20 per cent. solution has been employed extensively for several months in the University of Berlin clinic for diseases of the nose and throat, and in no case have they had any disagreeable symptoms arising from its use. He says it is of special value in endolaryngeal surgery. He has operated on a number of cases of tuberculosis of the larynx and found the anesthesia entirely satisfactory, the anesthesia lasting from 8 to 10 minutes. He further says that this anesthetic is a satisfactory substitute for cocaine and especially valuable in laryngo-rhinological practice.

The Indications for Operation in Chronic Suppuration of the Middle Ear.

Smye (British Medical Journal) says that the objective signs indicating operations in cases of chronic suppuration of the middle ear are as follows: 1. Pain on pressure over the mastoid, or more particularly over the antrum, that is, immediately behind the petro-superior angle of the meatus. This may be accompanied or not by post auricular swelling, and points to the supervention of an acute mastoiditis, or more often to caries affecting the external wall of the mastoid process or of the antrum. There is a possibility of error with reference to this sign, which to recognize will be to avoid. Furunculosis may occur with acute as well as with chronic otorrhœa. It is frequently attended by a temporary swelling behind the auricle. The absence of sagging of the posterio-superior wall of the meatus, which is commonly got in mastoid empyema as a result of acute middle ear suppuration, will point rather to caries of the external antral or mastoid wall. 2. A sinus behind the ear leading to en erosion into the bone. This is self-evident. 3. Caries of the petrous bone as disclosed by examination with the speculum and probe. The examination should be conducted methodically, the different parts of the ear being sounded with the probe to discover early carious foci. The caries may be isolated and accessible to treatment through the meatus. 4. An extensive or recurring growth of granulation tissue, pointing to invasion of the bone, is looked upon by Smye as a decided indication for operation. 5. Facial paralysis. 6. The presence of thick, cheesy masses in the tympanic cavity, the inference being that the same condition exists in the antrum. 7. Very foul smelling discharge. This is often the result of extensive involvement of the bone and the discharge may not be of large amount. 8. Stenosis of the meatus, either membranous or bony, both of which may be due to irritation caused by the purulent discharge. 9. Bacteriological examination of the discharge has hardly yet reached the stage of clinical importance. At present it would appear that a pure streptococci and staphylococci. The colon bacillus and the pneumococcus seem to exert a special baneful influence. 10. Persistent discharge in spite of regular and thorough antiseptic treatment.

A Modified Method of Appendectomy.

Kolliker (British Medical Journal) describes a plan of external incision which, the writer believes, causes very little injury, and is as good a preventive of ventral hernia as the method of super-imposed rows of suture. The skin incision commences at McBurney's point and is carried inward and downward toward the middle of the symphysis over a distance of about 8 centimeters. The exposed portion of the aponeurosis of the external oblique and from one-third to one-half of the sheath of the rectus having been divided, the latter muscle is set free by blunt dissection in the direction of the wound and drawn over toward the median line. After division of

the tendinous portions of the internal oblique and transversalis muscles and the transversalis fascia, a small opening not more than 4 centimeters in length is made in the peritoneum. The advantages claimed for this incision are these: The peritoneal opening lies behind the replaced rectus, and very little muscular tissue is divided. In closing the external wound only two rows of sutures are required—one for the peritoneum, and the second for all the other layers of the abdominal wall taken together. When exposure and separation of the appendix are hindered by adhesions the incision can be extended at either end.

He directs attention to two points which might be found useful in difficult cases of appendectomy. In a case of adherent appendix the anterior longitudinal band, it is stated, is drawn over in the direction of the displaced and fixed process, so that this band when convex along its inner margin indicates a retrocecal position of the appendix, and when convex along its outer margin an inner or pelvic position. If an adherent appendix be at first exposed near its attachment to the cecum and divided between two ligatures, and then dissected out from its proximal to its distal end, the operation will be rendered much easier than that in which separation of the process is the preliminary step.

Technique of Ventrosuspension.

Beyer (British Gynecological Journal) after full reference to the operation of ventrofixation and Kelly's operation of ventrosuspension, describes a method adopted by himself, in which no space is left between the peritoneum and the rectus muscle, the uterus in contact with the parietal peritoneum being brought firmly against the rectus muscle. The suspending silk sutures include on each side of the incision a few fibers of the rectus muscle—that is to say, a portion of muscular tissue about one-fourth of an inch in diameter. They are tied with just sufficient tension to bring the uterus firmly in contact with the parietal peritoneum, and yet not to cut through the muscular tissue. Of the patients operated upon by this method, 272 have been interviewed; 153 are now married, and of these 41 have been pregnant since operation; 37 have gone to term and borne a living child. In none of the 41 labors was there any complication which could be definitely attributed to the operation. It is, however, possible, but there is no proof, that in one case the operation was the cause of hemorrhage following labor. Nine women aborted or miscarried before the sixth month, but nine miscarriages, considering those induced, are not more than the average percentage in 153 women, for these cases represent all classes of women. In four instances the retrodisplacement recurred after operation. In three this occurred before the patients left the hospital. In two, as the result of pneumonia, the coughing caused such a strain on the abdominal walls as to sever the attachment. In the other the attachment was separated by the resident physician in removing the sutures from the cervix. In the fourth case the woman, regardless of advice, did a great deal of heavy lifting immediately on returning to her home, and the retrodisplacement recurred.

Interstitial or Tubo-uterine Pregnancy.

Kannegiesser (Zentralbl. f. Gynak.) reports a case in which a woman, aged twenty-seven, twice delivered normally at term, was seized on March 27, 1905, eight weeks after the last period, with symptoms of intraperitoneal hemorrhage. They began a few hours after an attack of pain caused by lifting a heavy bundle. Kannegiesser lays stress on the fact that, although the patient was clearly suffering from internal hemorrhage due to a ruptured gestation sac, the fornices were free, and the only palpable condition in any way abnormal was enlargement of the uterus. On opening the abdominal cavity, two and one-half pints of liquid blood and clot were removed. The hemorrhage proceeded from a villous mass only as big as a pea, posterior to the left cornu. This mass was connected with a sac lined with villi which projected into the uterine cavity. An elliptical piece of the cornu was excised; then the operator passed his finger into the uterine cavity and found that the os internum was closed. The endometrium was scraped away with a sharp spoon. Lastly, the wound in the cornu was closed, as in a conservative Cæsarean section, with deep and superficial silk sutures. Appropriate means were employed to restore the patient, and she recovered.

In a discussion on this case, Schmorl reported a necropsy on another, where the patient died before an operation could be performed; the hemorrhage was traced to a perforation no larger than a pin's head in a swelling on the left cornu. The gestation had not reached the second month; there was decided reaction in the ovaries and uterus. Leopold considered that these interstitial sacs occasionally developed in a diverticulum in the uterine portion of the tubal canal of the kind described by von Recklinghausen. Schmorl described a small tumor removed from the back of a uterus, which consisted of a thin wall inclosing a cystic cavity lined with uterine mucous membrane. This cyst, no doubt, developed from a diverticulum, and the implantation of an ovum was therefore quite conceivable. Kannegeisser laid more stress on the course

of the tubal canal than on diverticula. As Werth had demonstrated it, it did not run straight through the middle of the muscular wall of the cornu, but made a curve with the convexity backwards. Therefore it came much closer to the uterine serosa posteriorly than anteriorly, which accounted for the fact that rupture nearly always occurred posteriorly.

Hypertrophy of the Prostate and Diabetes.

Posner (Berliner klin. Wochenschrift) mentions the possibility of overlooking prostatic troubles when treating a diabetic patient. Again, the prostate may produce such severe symptoms as to cause the attending physician to overlook a diabetes. He believes that a hypertrophied prostate tends to predispose to a diabetes, as with it is usually found associated arteriosclerosis. The treatment of prostatic hypertrophy should be such as to ward off diabetes. The dangers of catheterization and operation are increased by the presence of glycosuria.

Protection from Tuberculosis by Lymph Glands.

Bartel (Wiener klin. Woch.) mentions the results of his experiments, which he says are positive proof that the lymph glands are the organs which take an active part in resisting the invasion of the tubercle bacillus. The normal lymphocytes of the sheep are able to destroy the virulence of the tubercle bacillus, so that guinea-pigs inoculated with bacilli so treated will not become infected. The writer says that the bacteria after contact with the lymphocytes of the sheep lose the power of reproduction, also their power of chemotaxis and reproduction, and will prove an effective immunizing material for producing an active immunity.

Ants as Carriers of Typhoid.

Meyer (Munchener med. Woch.) relates his experience with mice infected with mouse typhoid, and to whose cages ants had access, as also had they to the cages of some uninfected mice. Shortly after the ants were noticed the uninfected mice all became sick with typhoid. Plates of media over which the ants were allowed to run showed a pure growth of mouse typhoid along the ant tracks. He himself became infected, the typhoid bacilli being found in his stools and urine, and his serum giving an agglutination in dilution of 1 :250.

Therapy of Psoriasis.

Durling (Deutsche med. Woch.) advocates the free use of sweat baths in psoriasis, and states that they are employed too sparingly. The writer has failed to get good results from the x-ray treatment. For local medication he advises the oil of cade, chrysarobin, and pyrogallol, and suggests testing the susceptibility of the skin to irritants before using these remedies. The internal use of arsenic, sodium salicylate, and iodide of potassium is very uncertain, and a careful regulation of the diet should be observed.

Glycosuria in Pregnancy.

Moller (Ugeskrift for Laeger) kept a case of glycosuria limited to pregnancy under close observation. The patient was thirty-six years old and in her first pregnancy. Sugar was detected early in gestation, and it increased up to the fourth month, when it reached 2.93 per cent. Then the patient was put under suitable diet, and the proportion of sugar diminished until it had almost disappeared by the end of the seventh month, when the dieting was discontinued. There was no further rise and the patient was delivered spontaneously at term. A few days later the proportion of sugar was 0.15 per cent. The patient was able to suckle her child. After convalescence no sugar could be detected.

Uterine Fibroid and Uterine Cancer.

Piquand (Annales de. Gyn. et d'Obst.) has published a very complete summary of this question based on clinical and surgical evidence up to the present year. He concludes: (1) That he has been able to collect 360 reliable reports of this condition; (2) that there are three different varieties of these associated tumors. First, epithelioma may develop on a uterine fibro-myoma, a rare condition; 44 cases have been collected by Piquand. The malignant disease is nearly always derived from the uterine mucosa, occasionally from the ovary or other neighboring organ, and very rarely from lymphatic infection causing neoplastic emboli from distant parts (2 cases recorded). Piquand includes 24 more cases where primary cancer undoubtedly developed in a uterine fibro-myoma; the epithelial elements usually come from involutions of the uterine endometrium, but in exceptional cases are derived from relics of Gartner's or the Wolffian duct.

Secondly, cancer of the body of the uterus may exist together with a fibro-myoma. This is the most frequent combination. Piquand has collected 179 cases, and he further declares that according to the statistics of 1000 cases of uterine fibroid, cancer of the uterus was present in 15, a proportion eight or nine times higher than in other women. Thirdly, there remain cases where uterine fibroid complicates cancer of the cervix. The relation of the new growths is not so clear, the fibro-myoma appears to predispose the patient to cancer of the cervix. When the latter disease is clearly seen to be consecutive to fibroid, the subject is

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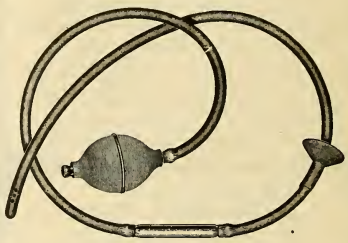

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The form of swearing by kissing a book, says the London Lancet, is purely one of custom. There is no direct authority for it in any Act of Parliament, or book of practice. The date also of its introduction is unknown, but this is not because it has been lost in the mists of antiquity, for it is fairly certain that so recently as at the end of the seventeenth century if the form existed it was not in any general use.

In Germany, where according to the popular opinion everybody is always engaged in absorbing beer, an association has been formed with the name of "The Society of Abstaining German Speaking Medical Practitioners."

A Scotch king, says Dr. A. Jacobi in the New York Medical Journal, would not permit a doctor to practice in his land till he had practiced 20 years among his enemies.

generally a multipara between 45 and 50, a remarkable fact since cancer of the body of the uterus consecutive to fibroid is most frequent amongst multiparæ between 50 and 60. (3) That total abdominal hysterectomy is the only surgical measure of any avail though it is dangerous and recurrence is frequent. Out of 68 total hysterectomies for fibroid and cancer of the body 11 proved fatal, and out of 52 for fibroid and cancer of the cervix 9 were fatal. Piquand considers the frequent association of cancer with fibro-myoma as a strong argument in favor of hysterectomy whenever the latter tumor develops.

"Liquid Medicines vs. Alkaloids."

In several of the medical journals there appeared an article, written by me, entitled "Superiority of Liquid Medicines Over Alkaloids."

The fact that it has been copied extensively by the medical journals of the allopathic, homeopathic and electic schools is sufficient evidence of the interest which it awakened among the editors of medical literature. Many favorable comments have been received regarding the position there taken.

As far as I have been able to ascertain, the criticisms against it have eminated only from those who are followers of the Abbott Alkaloidal Co. regarding the use of their preparations. Indeed, the most extended of these is from the pen of one of the editors of their journal, appearing in the February number of The American Journal of Clinical Medicine, formerly The Alkaloidal Clinic. By the way, if their method of prescribing the alkaloids is so far in advance of everything else known to the science of medicine ,why have they dropped the word "Alkaloidal" from their title?

The casual reader of the criticism on the editorial entitled "The Rounder" might think that some good points had been scored in favor of the alkaloids. The critical reader, however, who is familiar with the article which called the editorial into existence, must admit that the larger portion of the argument is based upon the two weakest parts of all discussions, namely, sarcasm and ridicule. These are always the weapons of those who feel their logic is poor and ther cause weak.

To the assertion that the article under criticism was written to aid any special manufacturer, I wish to make an emphatic denial. My intention was to show—and I still contend most positively that it does—the superiority of liquid medicines over alkaloids along three distinct lines, viz.: they ar emore easily absorbed, they exert their action more in conformity with Nature's laws, and they represent the product of Nature's laboratory.

Any one at all familiar with the laws of endosmosis and exosmosis must almit that such action only takes place with liquids. Hence, if solids are introdnced into the stomach they must be reduced to solutions before they can be taken into the blood and exert any effect. As soon as your alkaloid is dissolved it becomes as liquid and acts as such. The alkaloidists recognizes this fact when they make their solution before administering the drugs. There are many physicians, however, who prescribe the alkaloids in the form of tablets—more or less soluble—and these come under the head of solids and must be treated as such.

Vast quantities of quinine and strychnine tablets, or pills, are consumed by the American people annually. It is a debatable question whether they do more harm than good. There is no doubt that many deaths have been hastened by their excessive use. The condition known as quinism is far worse than that for which the massive doses of quinine are frequently prescribed.

Many times the continued use of strychnine produces an extreme hyperemia in the vascular system, which tends to prolong, instead of shortening, the difficulty.

Liquid medicines exert their action more in conformity with Nature's laws, because they more nearly resemble Nature's method of reproducing her own products. Show me a single work of Nature, either in the animal, vegetable or mineral kingdom, that is formed by the use of active principles alone, and I will be more willing to adopt the theory of exclusive alkaloidal medication.

There i suo chemistry which is so complex as that which is found in Nature's laboratory. She makes use of no needless ingredients. They all have their use and are employed for some specific purpose. Therefore, when we employ remedies made from plant structures instead of plant fragments in man's physicial condition, we are working along the lines established by Nature herself, and our efforts are likely to be crowned with success.

The gist of the argument, however, in favor of the liquid medicines as opposed to the alkaloids is that the former represent the whole plant, and the latter only a part, and possibly not the most important part at all.

Chemistry teaches us that sulphuric acid is represented by the fromula (H2S O4). That this acid is composed of sulphur trioxide (S O3) and water (H2 O). Hence, sulphur would represent the alkaloidal principle of the acid, as the hydrogen and oxygen are simply gases when reduced to their free state. Would any intelligent physician prescribe sulprur with the expectation of getting the caustic effect of sulphuric acid? Again, drop a single atom of oxygen from your sulphuric acid formula and you have sulphurous acid, the effect and use of which is entirely different from that of the stronger.

If a slight change makes such a profound result in a comparatively simple chemical compound, how can you estimate the change which takes place when all the elements except the alkaloid are eliminated?

In the article "Superiority of Liquid Medicines Over Alkaloids," I asked this question: "Who would be rash enough to assert that all the good of cinchona lies in the quinine, or of nux in strychnine?" My alkaloidal editor answers: "Only about nineteen-twentieths of the medical profession; and not one-hundredth would attempt to secure from the crude plants the benefits obtainable from these two alkaloids." That may be his opinion, but I am not ready to accept it as that of the profession at large.

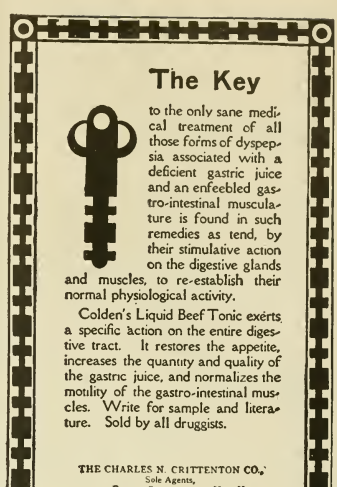
It belittles the use of nux vomica and cinchone in a way that is not at all compatible with the facts as known by those who are most expert in their use. Nux vomica has a place in the practice of medicine that is infinitely larger than the legitimate place of strychnine. Strychnine is principally a heart stimulant, and should be confined to stimulation of the muscular fibres of that important organ. Even here it should be used with care and moderation, for its excessive use will, most likely, produce undesirable results.

Nux vomica, on the other hand, has a wide range of action. The entire digestive tract will feel its beneficial action. Therefore, the use of nux vomica would naturally be as extensive as that of strychnine—with its contracted realm of action—would be restricted.

This may seem strong language to those who have not made a study of nux vomica, and do not understand what can be done with this remedy in large and small doses. I beleive, however, that over nine tenths of all eclectic and homeopathic physicians, and not a few of the allopathic, would bear me out in these statements.

Our alkaloidal editor—he did not sign his name—also tells us that "Nature regulates the plant physiology for the sake of the plant, and not for a supposititious human being who is to be created some millions of years later." Has he forgotten the fact that the fauna of each cycle of the world's history are adapted to that particular period in which they are found? That it would be as impossible to find the plants of our perod in those of prehistoric times as it would be to find the animals of that age in the world to-day! Vegetation on the earth's surface has ever been adapted to the needs of the animals living thereon. Hence, it is not "poetic or superstitious," but most emphatically practical common sense, to assert that the medical qualities in plants of the present time were intended for the use of those now inhabiting the globe.

The whole history of the eclectic school of medicine is a proof of the truth of this statement. They have always used, in their investigations and treament of diseased conditions, the preparations made from the entire plant. In the past seventy-five years they have collected and formulated a vast amount of practical knowledge upon the use of the indigenous remedies of our country. The value of their work is just beginning to be appreciated by the medical profession at large. Their method of cure is being more extensively practiced than ever before.



As these deductions have been drawn from experimentation with the whole plant, and not with plant fragments, it ought to be expected that their drug indications would serve as a guide for alkaloidal administration. That this is attempted, any one can readily satisfy themselves by reading the literature on the subject of alkaloidal medication.

I am accused of doing my colleagues a "gross injustice," when I claim that their freedom from therapeutic nihilism is due to their use of liquid medicines. That statement has been made many times before in eclectic medical literature, and has never been questioned. It remains for the alkaloidal editor to be the first—as far as I know—to raise the question. How far his interest in the Abbott Alkaloidal Co. caused him to make such a statement I leave for him to determine.

The alkaloidal craze was fought out in the eclectic school during the "fifties," long before John Uri Lloyd was identified with the manufacture of medicines.

My acquaintance among my colleagues is quite extensive, and I have yet to learn of a single one who has abandoned the use of the liquid medicines for that of the alkaloidal principles.

Enough has been said to counteract the statements in "The Rounder," as published by our alkaloidtl editor, and I am willing to leave the result in the hands of a discriminating and intelligent medical profession.—Pitts Edwin Howes, M. D.

Umbilical Surgery on the Newborn Child.

Meyer (Monats. f. Geb. u. Gyn.) operated recently on a newborn child with a large hernia without using an anesthetic, and the infant recovered, although the operation lasted for one hour and a quarter. The sac was very thick and consisted of amnion and peritoneum; they were separated and then a coil of ileum was discovered bearing a cystic Meckel's diverticulum. The neck of the sac was dilated, the cyst separated from the sac to which it adhered and resected, but suture of the ileum proved very difficult. The intestines were then reduced, the peritoneum sutured, the sac excised, and the integuments closed. Out of 32 radical operations for hernia of the cord at birth 6 deaths occurred, whilst 4 out of 7 cases of that form of hernia treated expectantly proved fatal.

The Treatment of Insufficiency of Milk in Women.

Burzagli (Gazz. degli. Osped.) after a good deal of somewhat rhetorical condemnation of the mothers who might but will not nurse their infants, proceeds to deal with those who would but can not owing to various causes Setting aside definite pnysical causes in the nipples or breasts, he discusses pure deficiency of secretion in breasts which otherwise appear healthy. Of the numerous galactogogues in vogue none seem to have any reliable action. Hearing that veterinary surgeons were in the habit of increasing the lacteal secretion in animals by means of aniseed given internally as well as used externally, the author tried this drug in the case of two healthy women whose milk became so poor and scanty that after trying various remedies in vain they had recourse to goats' milk for their children. After six days' treatment with a 2.5 per cent. infusion of aniseed taken internally (about a litre a day), and applied externally as a fomentation, the milk gradually came back, and the mothers were able to go on suckling their children. Two cases do not prove much, but coupled with the larger experience of veterinary surgeons the author thinks it well worth further trial.

Note on a Case of Osteogenesis Imperfecta (Idiopathic Osteopsathyrosis).

Fowler (Edinburgh Medical Journal) says that we owe our knowledge of the condition called osteogenesis imperfecta almost entirely to studies of fetuses, most of which have been still-born, only a few having survived birth for a few hours or days. It has therefore been assumed that this condition is incompatible with long life. He believes, however, that this is not so, but that children suffering from osteogenesis imperfecta may not only survive birth but reach adult life. The writer relates the history of a case of this kind. The child at the time of writing was three years old. From his study of this condition the writer concludes that: Children suffering from osteogenesis imperfecta may survive; the condition is recognizable clinically by the association of brittleness of the bones and craniotabes; osteogenesis imperfecta and idiopathic fragilitas ossium are two names for the same disease. He thinks that the most conclusive evidence of the identity of the two diseases is afforded by Looser's recent study of the morbid anatomy of idiopathic osteopsathyrosis.

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The only preparation of the Eucalypt produced from fresh green leaves of a selected species and containing the medicinal constituents in an active form.

In an action at law recently brought by Messrs. Sander & Sons, Bendigo, Australia, at the Supreme Court of Victoria, and tried before His Honor, the Chief Justice Sir J. Madden, K. C., M. G., L. L. D., against a party who tried to foist a eucalyptus preparation upon the market in a similar package to that in which the genuine "Sander & Sons' Eucalyptol" is contained, thus practising the grossest form of substitution, it was shown that this imitation was a crude, unrefined eucalyptus oil, containing all irritating substances and possessing no antiseptic power whatsoever.

His Honor, the Chief Justice of Victoria, said with regard to the Genuine "Sander & Sons' Eucalyptol" that whenever an article is recommended by reason of its good quality, etc., it is not permissible to imitate any of its features, and he granted a perpetual injunction preventing the defendant party from so doing.

There are many degrees between an absolutely inert and injurious article, and one which was proved by expert witnesses at this Tribunal of Justice to be absolutely pure and scientifically standardized, viz: the Genuine "Sander & Sons' Eucalyptol." But mediocrity has no place in medicine, and only the best and absolutely reliable article will make and maintain the Doctors reputation. Thus the necessity for observing strictest adherence to most scrupulous discrimination in securing an approved product is once more convincingly substantiated by the foregoing and furthermore strengthened by a report which Dr. Owen made some time ago to the Medical Society of Victoria. The Doctor states: "that a child living at Fitzroy, a suburb of Melbourne, became most seriously indisposed through the use of Eucalypt. The number of inert and even injurious products of eucalyptus has, since this report is made, rather increased than otherwise, and so we find now precaution more indicated than ever before. Therefore, please specify "Sander & Sons' Eucalyptol" when prescribing.

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"The substances of which Ayer's Cherry Pectoral is composed are those known to be most relied on by medical men for the treatment of pulmonary diseases. They, and their proportions, are accurately given in the Formula, which has been published in all the principal medical journals of the civilized world, and also submitted to the personal inspection of a large part of the Medical Profession of the United States and British America.

"As a consequence of this course, intelligent practitioners everywhere are familiar with its composition, nature, and effects, and we would respectfully suggest to patients suffering under affections of the lungs, that they should consult their physician respecting the more minute directions for its use in their particular cases. Thus may be secured the best effects of the medicine, aided by the practical wisdom of those deeply learned in the science of the Healing Art."

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When I first heard of the "Powdered Castor Oil" I thought at once—if this will do the work I need it in my practice. So I went to the Manufacturers for some, and found it to be a white, tasteless Powder. I give it with water, and they don't even know what they are taking. It works smoothly, and without purging,—gives a good healthy action, and my patients come back repeatedly for the "White Physic" as they call it. Any Physician whose patients kick at taking Castor Oil will do well to try the new "Powdered Oil."

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A Private Hospital for the Treatment of Nervous and Mental Diseases, Inebriety and Drug Habits.

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The recent enlargement, and consequent increase in number of patients, has made necessary the employment of an Assistant Resident Physician, who has entered upon his service. We purpose paying especial attention to the treatment of Drug Habits, and the permanent care of patients of both sexes, with chronic mental diseases of mild type. Other improvements are in prospect which will be announced when our plans are matured.

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For further information address the Superintendent, St. Peter's Hospital.

Musical Heart Murmurs.

Landelfi (La Ref. Med.) makes analyses according to site, time or heart cycle, etc. These murmurs are usually heard over the valvular areas, are prolonged and musical, like small ronchi that are heard in the small bronchioles of the lungs. Capozzi observed them in five cases, two of mitral insufficiency. In Landelfi's case, which came to autopsy, there was tuberculosis of the lungs, anæmia, and galoprhythm of the heart, with a musical murmur localized at the apex and not radiating. The murmur was not constant. The patient died without uremic symptoms. No valvular perforations were discovered; but there was chronic pericorditis, with concentric hypertrophy of the left ventricle. The left auriculoventricular orifice was normal and the whole valvular mechanism was sufficient. Probably, however, there was relative insufficiency; here Landelfi discerns a prognostic value, indicating that the heart was unable to carry on its work any longer. The writer believes that these murmurs are generally due to valvular insufficiency, but are not of diagnostic value.

Surgical Treatment of Empyema.

Greig (Edin. Med. Jour.) presents the statistics of 100 cases treated by partial removal of one or more ribs, and compares the results with 29 cases in the records of the Dundee Royal Infirmary from 1880 to 1890 inclusive, which had been treated by aspiration, aspiration followed by incision, or incision. Fifty-two per cent. of his own cases occurred in children. In the cases cited the mortality was: after aspiration, 87.5 per cent.; after aspiration followed by incision, 62.5 per cent.; after incision alone, 33.3 per cent.; after excision of ribs, 25 per cent. In cases where ribs were removed a second operation is required in 10 per cent.; where this was not done, one was necessary in 66 per cent. In hospital cases treated otherwise than by resection of ribs the average stay in the institution was 108 days; it was 68 days in cases with resection of ribs. In straight forward cases, without complications, in a young adult or child, the average duration of the wound after operation was 53 days.

Miscellaneous.

Examination Notice.

The Board of Medical Examiners of the State of North Carolina will meet at Charlotte, N. C., May 23rd-31st, 1906, for the purpose of examining all applicants for license to practice in this State. Applicants must show a diploma from a reputable Medical College, a certificate of good moral character signed by two physicians known to the Board and pay a fee of ten dollars before admission to the examination. The examination will be written and oral and on the following branches, viz:

(1) Anatomy and Microscopy.
(2) Physiology and Hygiene.
(3) Materia Medica and Therapeutics.
(4) Chemistry and Pharmacy.
(5) Surgery.
(6) Obstetrics, Gynecology and Pediatrics.
(7) Practice of Medicine.

The registration books will be opened promptly at 3 p. m. on the 23rd and all applicants should be present at that hour.

Reduced rates on all railroads within the State.

GEO. W. PRESSLY, Sec'y.
Charlotte, N. C.

When Sergius Witte was in New York, says the Youth's Companion, he asked how many of the arrests made in the metropolis the previous day had been for political offenses. On being informed that no one had been arrested for political cause he did not evince much surprise and in his turn related an incident that occurred on one of his visits to London. One day in that city his attention was attracted by a great crowd surrounding a man who was talking and gesticulating violently. Immediately surrounding the speaker were a number of policemen.

"I asked what was the cause of this," said Mr. Witte, "and my informant replied: "Oh, the police are protecting the speaker against the mob. He's attacking the King, you know, and the government and the social order."

Proper Medication and Cheerful Company.

During the past two months we have met with more lagrippe than anything else, and the number of cases in which the pulmonary and bronchial organs have been very slightly or not at all involved, has been greater than we have noted in former invasions. On the contrary, grippal neuralgia, rheumatism and hepatitis have been of far greater frequency, while the nervous system has also been most seriously depressed.

With each succeeding visitation of this trouble we have found it more and more necessary to watch out for the disease in disguise, and to treat these abnormal manifestations; consequently we have relied upon mild nerve sedatives, anodynes and tonics rather than upon any specific line of treatment. Most cases will improve by being made to rest in bed and encouraging skin and kidney action, with possibly min-

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The True Hepatic Stimulant and Eliminant

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restores normal functional activity of the Hepatic Cells. ¶ It does not irritate or otherwise act injuriously under continued administration. ¶ It corrects Acid Intoxication by overcoming its cause.

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Relieves Pain
without bad after-effects.

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Dose—5 to 10 Grains.
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A SPECIAL SPRING COURSE will be given from April 30th to June 9th, covering the following subjects:

General Medicine	General Surgery
Diseases of the Stomach	Orthopedic Surgery
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Diseases of the Skin	Diseases of the Rectum
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Courses in General and Clinical Pathology, Operative Surgery and Gynecology will also be given during this period, and the hours will be so arranged as not to conflict with the clinical work.

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ute doses of blue pill or calomel. We have found much benefit from the use of antikamnia & salol tablets, two every three hours in the stage of pyrexia and muscular painfulness, and later on, when there was fever and bronchial cough and expectoration, from an antikamnia & codeine tablet every three hours. Throughout the attack and after its intensity is over, the patient will require nerve and vascular tonics and reconstructives for some time. In addition to these therapeutic agents, the mental condition plays an important part. and the practitioner must not lose sight of its value. Cheerful company, change of scene and pleasant occupation are all not only helpful, but actually necessary in curing the patient.

In a new book "On Becoming Blind: Advice for the Use of Persons Losing Their Sight," written by a French physician who is a blind man, it is suggested that oculists would do the right thing if they always honestly told their patients if there was any hope of preserving sight, or not, so they could teach themselves while there was any sight left the first elements of Braille writing for the blind. The author says it is never right to lie to a blind man, no matter what may be the cost. A very important thing is to keep every object surrounding the blind person in absolute order to enable him to easily find what he wants. Blind people should be allowed to do as much as possible for themselves.

A NOVEL SUPPOSITORY.

One difficulty in the use of ordinary glycerine suppositories for the correction of rectal impaction, is in getting the patient to use them when needed. The old form of suppository is mussy and hard to remove from the bottle which cannot be carried around conveniently. Glycones, Lilly, are coated with an impervious water-proof wax shell and packed separately in small cartons.

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Centrally located on Greene street. Modern appliances throughout, giving unsurpassed facilities for the most difficult medical and surgical cases.

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A single Glycone in its carton takes up little room and may be carried in the pocket safely. Thus it may be at hand always ready for use. The coating is easily removed by scoring with thumb nail or knife and a fine glycerine suppository is made available without trouble or muss. They are supplied at no more cost than the other kinds. If you have never prescribed Glycones, you owe it to yourself and patients to investigate them. Samples will be furnished to any physician on application to the makers, Eli Lilly & Company, Indianapolis.

Should the tuberculous patient know his condition, is a question considered by Dr. Ambler in the Journal of the American Medical Association. He thinks it right that the patient should be told the nature of the disease. The doctor says: "For the good of our tuberculous patients; for the protection of their friends and the public generally; for the protection of ourselves, both physically and from censure, let us fully inform our tuberculous patients as to their disease, and when so informed take the time to properly instruct them what to do and what to avoid."

Labordine in Influenza.

Although influenza is a self-limited disease, still no available remedy could give any relief in the following case:

Mr. T. C., Italian, 35 years, laborer, took sick four weeks ago.

Symptoms.—Chill alternating with flushing and heat; lassitude; pain in the limbs; headache; fever, remittent in type, with evening exacerbations. Pulse increased in frequency. Debility; giddiness; restlessness; urine febrile.

Locally catarrh in the nose and conjunctiva, extending downwards; free watery acid discharge; sneezing; epistasis. Mouth, tongue and throat sore; taste impaired; severe frontal headache; hoarseness; paroxysmal, cough, dry.

Diagnosis.—La grippe.

Treatment.—At the outset I ordered a calomel and saline purgative. Diet liquid and nutritious (milk, beef-tea), very dilute solution of potassium nitrate with lemon juice and sugar as a free, cool drink. Irrigated the nares with solution of muriate of quinia. Alcoholic stimulants for debility. Quinine in full doses, etc. Three weeks passed and little or no improvement was noticed. Tried everything in materia medica, while I was going to give up the case, a sample of Labordine tablets arrived. I gave him these tablets every twenty minutes. After the fourth dose he felt somewhat relieved. I decreased the dose and gave it at longer intervals. After three days treatment with these tablets only he was very much improved. Today he left his bed for the first time in four weeks. Is still taking Labordine gr. v. every 20 minutes. Is still under my observation.

C. Deutsch, M. D.
107 E. 10th St., N. Y. C.

There is an old story told of a blacksmith, says American Medicine, who when he was asked how much he would charge for shoeing a horse replied that he demanded only a penny for the first nail, two-pence for the second, four-pence for the third, and so on through the 32 nails in the horse's four shoes. It seemed so simple that the contract was instantly given by the owner of the horse, but the amount reached the respectable sum of 2 984,257.298 pennies by the time the shoeing was completed.

The sample of Resinol Ointment which came into my hands to-day jogged my memory in regard to your preparations, and reminded me that I have been intending to write to you for sometime. During the past six months I have twice found it very efficacious. A young lady patient of mine had a very troublesome and unsightly eruption on the back of her neck extending up behind the ears on both sides. She informed me that she had been receiving treatment for it to no effect for over a month and I advised her to use Resinol Ointment. The result was a cure in a very few weeks, and three months have passed with no recurrence.

Several months ago I extracted some teeth for two boys and their father, and in a couple of days their mouths and chins were covered with eruptions, much to my discomfiture. Prescribed Resinol and Resinol Soap and the recovery was remarkably prompt. I could not account for causes in these cases, for I did the work in an antiseptic manner, but will say that I regard Resinol Ointment as an exceptionally valuable preparation.—A. S. Wolff D. D. S., 2100 N. 11th St., St. Louis, Mo.

"You must understand that wages are now very high," remarked the clerk to a lady who had complained about the cost of silk. "And besides," he continued, "there has been a great scarcity of silk-worms during the past year."

The next day when a customer objected to paying a high price for some tape the same clerk glibly explained:

"We are compelled to raise the price of tape because labor now is so costly. And besides there has been a great scarcity of tape-worms during the past year."

There are about 11,000,000 Jews in the world, half of them being under Russian jurisdiction.

IN THE TREATMENT OF

ANÆMIA, NEURASTHENIA, BRONCHITIS, INFLUENZA, PULMONARY TUBERCULOSIS, AND WASTING DISEASES OF CHILDHOOD, AND DURING CONVALESCENCE FROM EXHAUSTING DISEASES,

THE PHYSICIAN OF MANY YEARS' EXPERIENCE

KNOWS THAT, TO OBTAIN IMMEDIATE RESULTS, THERE IS NO REMEDY THAT POSSESSES THE POWER TO ALTER DISORDERED FUNCTIONS, LIKE

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MANY A TEXT-BOOK ON RESPIRATORY DISEASES SPECIFICALLY MENTIONS THIS PREPARATION AS BEING OF STERLING WORTH.

TRY IT, AND PROVE THESE FACTS

NOTICE.—CAUTION.

THE success of Fellows Syrup of Hypophosphites has tempted certain persons to offer imitations of it for sale. Mr. Fellows, who has examined samples of several of these imitations, finds that no two of them are identical, and that all of them differ from the original in composition, in freedom from acid reaction, in susceptibility to the effects of oxygen when exposed to light or heat, in the property of retaining the strychnia in solution, and in the medicinal effects.

As these cheap and inefficient substitutes are frequently dispensed instead of the original, physicians are earnestly requested, when prescribing the Syrup, to write "Syr. Hypophos. FELLOWS."

SPECIAL NOTE.—Fellows' Syrup is never sold in bulk, but is dispensed in bottles containing 16 oz.

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DESCRIPTIVE BOOKLET ON APPLICATION

Commenting on a recent case of poisoning from anilin dye, the Philadelphia Medical Summary remarks:

"It was first discovered about twenty years ago that stockings and slippers dyed red, pink or blue with anilin dyes were dangerous, though the bad effect was limited to irritation of the skin.

"Experiments on animals have proved that the absorption of concentrated anilin dyes through the skin may cause serious asphyxia by causing degeneration of the corpuscles of the blood."

I hereby volunteer to make a few statements regarding your product known as Resinol Soap. I have found it to be a wonderful article for treatments of itching scalp. I have had some erysipelas taint in my system for about two years or maybe longer. It began, a few months ago, to take on a very aggravating form on my scalp. There were scales and rash and two small lumps formed upon and within the skin on the scalp. It occurred to me that Resinol Soap might be beneficial if used for a shampoo. I procured a cake of the Soap and took it to my barber and requested him to use it freely on the scalp and rub it into the scalp very thoroughly, and then dry the hair with dry towels, not washing the Soap off, but leaving it on the scalp in order to get the full benefit of the medicinal qualities of the Soap. This treatment leaves the hair in a fine condition, and the result of this treatment upon the scalp was amazing. In twenty-four hours it did not look like the same scalp. I was delighted to be so completely and entirely relieved of the itching, I have had my scalp treated with the Resinol Soap once a week for the past few weeks, resulting in one of the lumps in the scalp disappearing entirely and the other lump is nearly gone.

I have also found the Resinol Ointment the best I ever used for eruptions on the skin. It is not only a wonderful healer, but it is of such pleasing consistency that it is a pleasure to apply to the most sensitive parts. I am enthusiastic over these two healing articles, Resinol Soap and Resinol Ointment. You are at liberty to make it known to the public the high esteem in which I hold these two remedies.—H. A. Cross, D. D. S., 560 E. 55th St., Chicago, Ill.

The Prussian ministry for railways, says the Medical Record, has placed at every important railway center throughout the kingdom a magnificently built and appointed car for the transport of the sick. The cars have gas stoves for cooking and ingenious devices for muffling the sound caused by the motion of the train. These cars are intended especially for use in case of an accident, but they will also be at the service of any invalid needing transportation.

A case of feigned insanity which was revealed by the administration of ether is related by Dr. C. G. Wagner in the Medical News. This criminal who was condemned for murder simulated the manner and expression of imbecility for 18 months. He appeared unable to walk or to stand erect. As the effect of the anaesthetic wore off and consciousness returned he walked across the room and became rational. He finally confessed that he had been malingering and was executed.

Chicago's Health Department prohibits the display of meats on the street in front of butcher's shops. The ordinance reads that "no animals shall be slaughtered or the meat or any part thereof dressed or hung, wholly or partly, within any street, avenue, or public alley or place."

The mother of 25 children recently died in Pennsylvania at the age of forty-seven years. She was married when she was fourteen years old and only twice gave birth to twins.

Status of the Colored Brother in Relation to the A. M. A.

"Yes, colored physicians are eligible to membership in the American Medical Association, and there are colored physicians at present members of the American Medical Association."—Dr. Geo. H. Simmons, Secretary, and Editor Journal A. M. A.

Worse and worse! We have practicall agreed to swallow every other kind of doctor, and if we do not gag at ostoes, homoes, physiomeds, and faith healers, the next figue on the porgram of the great Medical Union and Medical Journal Trust is to force the negro down our throats. Fancy sitting by Dr. Sam at an A. M. A. banquet!

The following correspondence will be read with deep interest by all Southern physicians, at least:

Austin, Texas, March 8, 1906.

Dr. Geo. H. Simmons, Secretary A. M. A., Chicago.

Dear Doctor: Having been interrogated by some of my colleagues of the Texas State Medical Association as to the status of colored physicians in relation to the American Medical Association, I beg to ask of you information on the subject for publication. Please see page 333 of the Texas Medical Journal for March. I there quote the Medical Sentinel to the following effect: "The American Medical Association declares that any practitioner of medicine who is a gentleman, regardless of school of practice, may become a member of that body." * * * "The American Medical Association has delegated to that body (meaning the county medical societies) the privilege of naming those who may or may not become members of the parent organization, stipulating only that no discrimination shall be exercised against candidates merely because schools of practice differ."

That is to say, if I understand it, any physician of any school, "Regular," Homeopath, Eclectic, Osteopath, Physio-Medical, or what not, black or white, may become a member of the National Association, provided he is "a gentleman." Now, does the American Medical Association say that a colored physician is not a gentleman, and discriminate against him on account of race color or previous condition of servitude? If so, I am answered, and no negro need apply. If otherwise, the negro of any school it would seem is eligible; if not, why not? Please answer. In Texas, he is not admitted to State or county society. In other States doubtless he is, and my specific inquiry is: Are colored physicians eligible to membership in the American Medical Association? The Medical Journal further says: "The National body officials represents the entre profession." Are colored brethren a part of the profession, and are they represented?

Awaiting your official answer, I am, sir,

Respectfully yours,

F. E. DANIEL, M. D.,
Editor Texas Medical Journal.

American Medical Association.
Office of General Secretary.
103 Dearborn Ave.
Chicago, March 13, 1906.

Dr. F. E. Daniel, Austin, Texas.

Dear Doctor: Your letter of the 8th inst. has been received, and I am very glad to give you the information asked for. Your letter, analyzed, asks two questions: First, whether the American Medical Associatiion admits Homeopaths, Eclecties, Phyio-Medicals, Osteopaths, etc., and, second, whether it admits negroes.

First, in regard to the admission of sectarians, I enclose a copy of the Constitution and By-Laws, and quote from the section governing membership: "A member in good standing of the constituent Association of the State in which he resides, or a medical officer of the U. S. army, of the U. S. navy, or of the U. S. Public Health and Marine Hospital Service, may become a member of the American Medical Association," etc. The second and third sections provide that when a member of the A. M. A. loses his membership in the lower society, or in the government service, he thereby loses his right to membership in the National Association. When he is restored to membership in his local society, he can again become a member of the A. M. A. In other words, membership in the A. M. A. depends on membership in the State Association, or one of its somponent branches.

The American Medical Association does not indicate to the State Association whom it may

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or may not admit. The State Association usually allows the component county society to say who shall be admitted to membership, subject, however, to certain limitations. For instance, the Constitution and By-Laws of the State Medical Association says:

"Each county society shall judge of the qualification of its own members, but, as such societies are the portals to this Association and to the American Medical Association, every reputable white and legally registered physician who is practicing, or will agree to practice, non-sectarian medicine, shall be entitled to membership."

This section appears in the By-Laws of most of the State Associations, modified in some instances by the omission of the word "white."

A reference to the By-Laws of the county societies will show that the same provision occur there, showing that sectarians can not be admitted unless they give up their sectarian claims. For instance, Article III of the standard Constitution for county societies says:

"Every legally registered physician residing and practicing in.....county, who is of good moral and professional standing, and who does not support or practice, or claim to practice, any exclusive system of medicine, shall be eligible to membership."

Replying to your second question: "Are colored physicians eligible to membership in the American Medical Association, and are there any colored physicians at present members of the American Medical Association?" To both of these questions the answer is "yes." But you are bringing up a question that was settled many, many years ago. Let me quote from the address of Dr. J. Marion Sims, one of the greatest surgeons that this or any other country ever produced, which he delivered as president of the American Medical Association in 1876:

"Who can forget the last meeting held in this city, Philadelphia, in 1872, when so much time was wasted in discussing the woman question and the negro question, incidentally arising out of the question of representation? Fortunately for us these vexed questions are now all settled quietly and in the most natural way. Formerly we admitted delegates from small corporations and local societies that were sometimes temporarily hatched up for the purpose of forcing objectionable persons upon us. Now we are a truly representatieve body, made up of delegates from State and county medical societies; and we must, of necessity, receive such delegates as any of these societies, properly organized, may see fit to send us."

The general principles as stated by Dr. Sims in 1876 apply today.

If the above does not cover the points you have in mind, let me hear from you again.

Respectfully yours,

GEOGE H. SIMMONS,

Raise the Lone Star Flag Once More.—This decision should cause every Southern physician to withdraw from this ollapadrida, this pot-pouri, where all is fish that comes to the Octopus' net. The lion and the black lamb will never lie together. Let the Texas State Medical Association secede from the medical union, and once more raise the Lone Star Flag of Texas.

Homoepathic Leavings of the A. M. A. Loaf: "Beware of the leaven of the Pharisees, which is hypocricy."—(Luke xii, 1.) The A. M. A. as a leveler of Distinctions: The homoepathic leaven is at work, and medicine must be leveled to the plane of the pathics and the darkies. That is the "toot," as I understand it, that was sounded by Gabriel McCormack in the blast he gave the Oregon fellows. Indeed, when McCormack was here, in his lecture he advised us to blend with the homos, and notwithstanding the Constitution of the county medical societies distinctly says that professional recognition shall not be extended to those who practice upon an exclusive dogma, the councilmen of the district and the Texas Tentacle of the Octopus at Fort Worth, are advocating it. It is itme for self respecting physicians to cut loose from the American Medical Association and refuse to be thus hearded with the ring-streaked and striped cattle at the behest of the great reformed homo who now runs that machine. Misegenation will be the next move.—Texas Medical Journal.

How to Obtain Pure Milk.—The conditions under which city dairies are operated are much better now than ten years ago. Municipal milk inspection has accomplished much good, but it is a fact that pure milk—**safe milk for infant feeding**—can be secured only with great difficulty in most cities, and often smaller communities are no better served. Milk once contaminated cannot be made suitable for infant feeding as neither pasturization or sterilization will destroy the toxins. Modification of milk, both simple and with cereals, has its place according to the individual conditions which confront the practitioner, but the main question is one of pure milk. The physicial condition of milch cows, their food and habitat has a direct bearing on the value of their milk for infant feeding.

Poper safe-guarding of the child dependent on substitute feeding includes a thorough knowledge of the source of the milk. There is a vast difference in quality and purity of milk from stable-fed cattle and those which are at pasture eight months of the year and in the open air at least the greater part of the remaining months. No secretion is more subject to contamination than the lacteal fluid and it is a matter of much consequence whether cattle are stable-fed on slops and garbage or graze in rich pastures with an abundance of exercise and pure air.

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These are timely and handy preparations. Their utility has no bounds. They are helpful in all skin troubles. Skin inflammations, such as Sunburn, Eruptions of Poison Oak, Scalds and Burns, or those caused by the handling of chemicals, as in developing KODAK FILMS, etc., yield immediately to the healing qualities of Resinol Ointment. For Eczema, Herpes, Pruritus, Barber's Itch, etc., it is the recognized and standard prescription with the rank and file of medical men.

Resinol Soap should always be used as a prophylactic, and as an adjunct to the Ointment. Samples sent on request.

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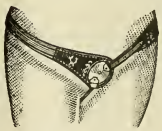

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This is one of the reasons for Highland Brand Evaporated Cream being such a satisfactory substitute food for infants. On the model dairy farms under he control of the manufacturers of this product, the hygienic and dietetic conditions of the cows are probably unequalled. The latitude of the farms is also favorable as the cattle have a much longer season for grazing and can be out of doors practically the entire year.

Highland Brand Evaporated Cream is an unsweetened condensed milk—the original and for many years the only product of this character. It is absolutely germ free and by the addition of two and one-half times its volume of water, a milk of uniform and su-

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The original effervescing Saline Laxative and Uric Acid Solvent. A combination of the Tonic, Alterative and Laxative Salts similar to the celebrated Bitter Waters of Europe, fortified by addition of Lithium and Sodium Phosphates. It stimulates liver, tones intestinal glands, purifies alimentary tract, improves digestion, assimilation and metabolism. Especially valuable in rheumatism, gout, bilious attacks, constipation. Most efficient in eliminating toxic products from intestinal tract or blood, and correcting vicious or impaired functions.

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perior quality is obtained.

Futhermore, it is more easily digested than either raw, pasteurized or boiled milk. (See Mojonnier's rport, Medical News, N. Y., Nov. 4, 1905.) Samples and literature will be sent on request to Helvetia Milk Co., Highland, Ill.

The following doctors while in attendance at the New Orleans Polyclinic made a trip to Central American ports as Marine Medical Inspectors on fruit steamers for the Louisiana State Board of Health:

Dr. O. Patton, Midway, Texas; Dr. J. H. Buckley, Ft. Smith, Ark.; Dr. T. R. McClellan, Gainesville, Ala.; Dr. A. Aiken, Dewalt, Texas; Dr. R. H. Harrison, Alleyton, Texas; Dr. G. W. Cross, Brownwood, Texas! Dr. T. P. Bell, Washington, D. C.; Dr. A. C. Miller, Waxahachie, Texas; Dr. V. H. Cains, Demopolis, Ala.; Dr. J. W. Phillips, Zimmerman, La.; Dr. J. C. Davis, Tundra, Texas; Dr. A. H. Speer, Madisonville, Texas; Dr. W. P. Moore, Culleoka, Tenn.

"This Here Jones" (of the California Tentacle of the Octopus) harps continually on and derides and denounces the "individually owned, and conducted-for-profit-medical journals," meaning the independent medical press. I wish to be informed for what is the Octopus run, if not for profit? For amusement, or for Dr. Simmons' health? "This here Jones" says himself that its profits, annually (excess of income over expenses), is plus $40,000, and it is generally credited with an income of nearly a quarter-million dollars. Now, what is done with this $40,000 annual profit? It is invested in revenue-producing real estate and stocks, etc. For whose benefit? Has a dividend ever been declared?—not annually, as it should be, but—even once? One dividend would give each of the subscribers to the Octopus (said to be 20,000) a rebate of $2, which would reduce the subscription to $3 a year; and an annual dividend should enable the Association to furnish at least its transactions free to members, as we always did in Texas before the change was made to a journal without the knowledge or consent of the members. O, Jonesey, go chase yourself.

A Valuable Local Application.

The great featurs of Pond's Extract Antiseptic Cream is its remarkable soothing properties. In the most irritable conditions of the mucous membranes its use is followed by pormpt releif, and in all the inflammatory skin lesions it has a wide range of usefulness. Its antiphlogistic action is marked, and one application often immediately allays the burning, smarting and itching of an eczema or a dermatitis. In pruritus ani it will stop the itching at once. It can be applied with perfect impunity to the sensitive skin of the youngest infants, and for intertrigo or the erythemas of childhood it is a superior ointment.

In all these conditions Pond's Extranet Antiseptic Cream is not only pallative but through its healing influences it assists reparative function. Physicians who have used Pond's Extract Antiseptic Cream are a unit in expressing their appreciation of its value as a local therapeutic agent.

A Boom Under the Octopus.

We have received a circular containing a letter and official order to all postmasters sent out by the Third Assistant Postmaster General, pinting out the abuse of he second-class mailing privileges by publications that charge either no subscription or a nominal one, and the circular shows, by the following, extracted from the Journal of the American Medical Association, that that publication is not a legitimate publication, entitled to second-class artes; and it will have to do one of the two things: charge a subscription price and stick to it, or go out of business, as the free distribution of any publication is a violation of the postal laws and must not only be stopped, but will be punished. The circular states that the same applies to all State journals that are given free in consideration of payment of society dues. "Here's a pretty dowde-do."

MEMBERSHIP IN THE AMERICAN MEDICAL ASSOCIATION.

The qualifications for membership require that the applicant be an active member of his county association, if there is one. If there is none, membership in the State Associaiton, or in one of its branches, is necessary. Applications must be accompanied with a certificate showing that the applicant is an active member of such recognized society, and should be sent with the annual dues—five dollars—to the American Medical Association, 103 Dearborn Avenue, Chicago. Members recive the Journal free. A subscriber who is qualified can have his name transferred to the membership list without expense, provided his subscription for the fiscal year is paid—Journal American Association.

"In a certain part of Europe," remarked the old doctor, "there is an old custom which is so strange that I hardly ever find any one to believe it when I tell about it, except those people who know it to be a fact. It is this: When a child is born the father goes to bed and his friends visit him and bring presents for him during the ten days he is confined to his bed, while in the meantime the mother attends to her usual household duties."

While for fifteen years, says the Medical Record, no suicide of a Jew was recorded in the seven great districts that comprise the most populous part of central London, recently there have been several cases.

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The original antiseptic compound

Listerine is an efficient and very effective means of conveying to the innermost recesses and folds of the mucous membranes that mild and efficient mineral antiseptic, boracic acid, which it holds in perfect solution; and whilst there is no possibility of poisonous effect through the absorption of Listerine, its power to neutralize the products of putrefaction (thus preventing septic absorption) has been most satisfactorily determined.

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Awarded Gold Medal (Highest Award) Louisiana Purchase Exposition, St. Louis, 1904

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A saponaceous detergent for use in the antiseptic treatment of diseases of the skin

Listerine Dermatic Soap contains the essential antiseptic constituents of eucalyptus (1%), mentha, gaultheria and thyme (each ½%), which enter into the composition of the well-known antiseptic preparation Listerine, while the quality of excellence of the soap-stock employed as the vehicle for this medication, will be readily apparent when used upon the most delicate skin, and upon the scalp. Listerine Dermatic Soap contains no animal fats, and none but the very best vegetable oils; before it is "milled" and pressed into cakes it is *superfatted* by the addition of an emollient oil, and the smooth, elastic condition of the skin secured by using Listerine Dermatic Soap is largely due to the presence of this ingredient. Unusual care is exercised in the preparation of Listerine Dermatic Soap, and as the antiseptic constituents of Listerine are added to the soap after it has received its surplus of unsaponified emollient oil, they retain their peculiar antiseptic virtues and fragrance.

A sample of Listerine Dermatic Soap may be had upon application to the manufacturers—

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Bronze Medal (Highest Award) Exposition Universelle de 1900, Paris

The Bloodless Phlebotomist.

The April issue of The Bloodless Phlebotomist contains a grist of interesting original matter which will appeal to medical men.

Among the leading articles are:

Proprietary Remedies from the Physician's Standpoint, by W. J. Robinson, Ph. G., LL.D., M. D., of New York.

Delirium Tremens, by T. B. Crothers, M. D., of Hartford.

The Alkaloidal Treatment of Pneumonia, by W. C. Abbott, M. D., of Chicago.

Otitis Externa Circumscripta, by Prof. James A. Campbell, M. D., of St. Louis.

The Bloodless Phlebotomist occupies a unique position in journalism. It is original, liberal and exceptional. There is no other journal like it.

It is not wedded to one idea, nor is it hidebound nor prejudiced.

It says what it means and means what it says.

The Bloodless Phlebotomist circulates 208,000 copies each issue, reaching practically every English speaking physician on the globe.

It is a journal worth cultivating.

Latent Rheumatic Conditions.

It is during the spring months more particularly that the physician is called upon to treat patients, who though not ill enough to be in bed, are not at all well. Their appetite is capricious, they sleep indifferently, or even if they sleep soundly they are not refreshed, and in the morning they are almost as fatigued and ill at ease as was the case on retiring. Upon awakening there is frequently an aching sensation in the loins, sometimes in the lower limbs, which may partially wear off as the day progresses, but there is at all times a vague, undefined, uneasy painful feeling.

The symptoms are very much like those experienced in malaria, but the causes are entirely different and a different treatment is neccessary.

This condition arises from the fact that in the spring the eliminative functions do not present their usual activity owing to the torpor and locked-up secretions which have existed during the winter months, when the skin neglects its duties and the kidneys are overworked.

If the condition remains neglected the probable result will be sooner or later a pronounced attack of rheumatism or grippe in one or another of its forms. All that is needed to induce such an attack is a sudden change in the weather or the exposure on the part of the patient to cold or wet or to a combination of both. This is due to a latent rheumatic diathesis to which every adult is liable.

The necessity of a powerful eliminant in every prescription for rheumatism and grippe is self-evident. While anti-pyretics and antiperiodics may slightly stimplate the excretions and relieve congestion thereby controlling certain features of the disease, a complete cure cannot be expected until the poisons are thoroughly eliminated from the system and the diseased organs enabled to resume normal functions.

In the treatment of all rhematic, neuralgic and grippy conditions, Tongaline, by promoting the absorptive powers of the various glands which have been clogged, and by its stimulating action upon the liver, the bowels, the kidneys and the skin, will releive the pain, allay the fever, eliminate the poisons, stimulate recuperation and prevent sequelae.—By J. R. Phelan, M. D., Oklahoma City, Okla., Editor Oklahoma Medical News Journal.

Avoidance of Anesthetic and Surgical Shock.

The chance of anesthetic and surgical shock may be greatly lessened or avoided by proper preparation of the patient whereby there is secured restoration of normal activity of the liver, in particular, kidneys and skin, together with normal elimination by the bowels and correction of acid toxaemia. Inadequate preparation of the patient is responsible for more deaths than operations themselves, for as a rule patients requiring operation are not up to the normal standard of health. It is hence a great risk to submit them to operation without sufficient preparation.

Sulpho-Lythin, which is a true hepatic stimulant, replaces calomel in all cases where that drug is indicated, and is indespensable in the preparation of patients for operation and during the after treatment of convalescence because it may be taken continuously without injury. Its judicious use in preparing patients for operation obviates both anesthetic and surgical shock by restoring functional activity of the liver and excretory organs and counteracting acid toxaemia.

International Journal of Surgery, February, 1906.

Stubborn cases of Rheumatism.—Many stubborn cases of rheumatism respond rapidly to the influence of "Tongaline." This product, representing the highest degree of pharmaceutical skill, contains the salicylates in an unusually potent form, in as much as they are not obtained by synthesis but are extracted from the purest oil of wintergreen. In addition to thir poteney as anti-rheumatics they possess an additional advantage in not deranging the most sensative stomach.

Physicians who appreciate the progress of honst pharmacy will find in "Tongaline" a product worthy of their highest commendation and confidence.

Journal American Medical Association.

Mr. Editor:—I was much pleased to read your editorial caution upon the business methods of The Journal of the American Medical Association. Originally intended for the build-

JOHANN HOFF'S MALT AND IRON

(PEPTONATE OF MANGANESE AND IRON.)

Is an ideal preparation to build up

BLOOD AND BODY

(Each wineglassful contains 1 gramme of Peptonate of Manganese and Iron.)

It is a Nutrient Oxygen Carrying Agent

Contains only a minimum amount of alcohol (less than 3%); is more readily absorbed into the circulating fluid than the iron preparation by itself.

Johann Hoff's Malt and Iron is of marked and certain value in all forms of Anæmia, Chlorosis and general debility.

EISNER & MENDELSON CO. of New York,

SOLE AGENTS.

ing up of the Association, the publication of the papers read before it, etc., it has become commercialized, and runs the Association. It is subordinated to the making of money. It is after advertisments, and the sum of $5.00 from any one who will subscribe.

In your editorial, you mentioned the scandals in connection with some of the life insurance companies. It is probable that no one who handles the immense sums now calculated, and accumulating through the diligent and competetive instrumentality of the Journal is under bond, or gives any kind of security.

Of course, there is an auditing committee, but in addition to the fact that Doctors are not also accountants, the time in which the committee is with the treasurer, and with his books in the hurly-burly of an annual meeting, is much too brief in which to detect shortages, false entries, etc. Such auditing committee, from the nature of the case, is a mere form.

In Democratic politics we heard much of the dangers of a surplus. The surplus in the coffers of the Journal people ought to be very large. As you wrote, it might be used for many useful purposes.

After it is used up, I would suggest, for the good name of the Association, that the Journal be so managed that it could not accumulate a tempting surplus—only a sufficent amount for its publication. Its price ought to be greatly reduced, and it should decline all advertisements.

Thos. R. Evans, M. D.
Olcott, W. Va.

—Va. Semi Medical Monthly.

A Delicious Food—Write to the Battle Creek Breakfast Food Co., Quincy, Ill., for free package of their delicious whole-wheat food. EGG-O-SEE. This food should not only be an essential part of your daily breakfast but will prove an agreeable addition to every meal.

Digestibility of Egg-o-See—Herewith are presented the results of the experiments, undertaken with the object of determining the comparitave digestibility of Egg-o-See and wheat bread.

The ease with which such food as Egg-o-See may be digested and made capable of being absorbed by the tissues may depend upon two factors, first the readiness with which the food elements themselves yielding to the action of the degestive enzymes and become broken up into their assimilable cleaverage products, and, secondly, the rapidity with which these enzymes are able to attack the food owing to its condition when eaten. That is, a dry substance like Egg-o-See cannot be swallowed without thorough chewing, in the course of which it is reduced to small fragments and easily penetrated by the digestive fluids, while bread on the other hand, especially fresh bread,

is much more easily bolted in large pieces and only partially masticated. Accordingly, in the following experiments, it was thought best to use as a control some bread.tuffs, such as soda crackers, in the same dry condition as Egg-o-See and broken into fragments of the same approximate size. A sample of thoroughly dried crust of bread was also used for the same reason.

The usual procedure in artificial digestion was followed. Carefully weighed amounts of the substances to be tested were taken, the percentage of proteids in each being first determined. These substances were placed in a quantity of distilled water and equal amounts of pancreatin and a dilute solution of sodium carbonate added, the whole being put into flasks and the flasks placed in an incubator at 37.5 degrees C. (body temperature), the digestive process being permitted to act for one and one-half hours for one test and three hours for another series. At the expiration of these perods the digestive process was stopped and the flasks were turned over to Professor Keiser, Professor of Chemistry, for chemical analysis. Professor Keiser first filtered the solution from each flask and after washing the residue with distilled water, dried in and determined its weight. The difference between this weight and the weight of the original substance in each experiment gave the weight of the substance digested and from this was calculated the percentage of digestion.

From these results it was found that in the same period of time and under the same conditions in which 23 per cent of bread or of crackers is digested, 47 per cent of Egg-o-See is digested. In other words, Egg-o-See is twice as easy to digest as bread or crackers. This ratio is not materially altered when the digestion is carried for a longer time as is seen in the second table.

It will be recalled that artificial digestion, the presence of the end products, as digestion proceeds, inhabits more and more the action of the digestive enzymes so as to gradually slow down the rapidity of the digestive process and eventually to bring it to a standstill. Accordingly it is impossible to completely digest any food substance in vitro no matter how long the process be continued. This accounts for the apparently disporportionate amounts of wheat bread and Egg-o-See digested in a longer course of digestion as compared with the amount digested in the previous experiments; of course, in the alimentary canal, where the end products are absorbed as fast as formed digestion would be completed in much shorter space of time.

In the liquid filtered off from the undigested portion in each flask Professor Keiser made careful determinations of the amount of sugar present and found that the amount of sugar in the digested Egg-o-See was four times as great as the amount in digested bread and twelve times as great as the amount obtained from the soda crackers.

Comparing Egg-o-See with soda crackers it was evident that the greater digestibility of Egg-o-See cannot be due alone to the mechanical factor of its dried condition.—James Francis Abbott, Professor of Zoology, Washington University, St. Louis, Mo.

We notice in a report published August, 30th, 1905, in the "Age" of Melbourne, Australia, that a concern, attracted through the renown of "Sander & Sons' Eucalyptol" has imitated the make-up of the goods of that well known firm, to foster by this move its counterfeit upon the trusting public. Sander & Sons instituted proceedings against the imitator and obtained a verdict, by virtue of which the concern in question is perpetually restrained from exercising this malpractice.

If we consider this attempt at imposition in conjunction with the many inferior brands of Eucalyptus in the market, it becomes obvious that supreme guarantee against discomfiture and injury finds a safe guard only in insisting on getting the genuine article. Sander & Sons preparation has obtained the universal endorsement of the profession. Its therapeutic effects are always certain. Therefore we counsel, at all events where this preparation is intended to be obtained, not to submit to substitution. Disappointment is certain to follow.

Chronic Recurrent Coughs and Their Treatmeet.

Abstract of article by J. E. Alter, M. D.—In treating coughs we quite often encounter obstinate cases, which no matter what combative measures may be instituted, will continue without abatement. Such cases are best classified as the Chronic Cough and the Recurrent Winter Cough. Both of these classes are extremely obstinate in thir course and yield reluctantly to treatment. They are usually of long duration, and, while not, in themselves, directly dangerous, may become so by inducing emphysema and bronchiectasis.

In the great majority of chronic and recurrent winter coughs, the basic trouble lies in a low form of inflammation of the bronchial mucous membrane; especially that of the bronchioles.

In many cases I have used Codeia, but lately I have been having much more success with another derivative of opium, i. e., Heroin. In comparing the results obtained from the use of these two drugs, I notice that heroin will not constipate the patient, nor will it have the stupefying effect characteristic of codine. Another advantage possessed by heroin is that it is effective in young children, in very small doses.

I had been accustomed to prescribe heroin alone, but, about a year ago, my attention was called to a preparation of that drug—Glyco-Heroin (Smith). Upon giving it a good trial

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I found that it gave me better results than obtained when heroin alone was given, and much more quickly. Glyco-Heroin (Smith) has one distinctive advantage over plain heroin in that it can be given for a long time without ill effects, and in the class of patients in question this is, indeed, a most important feature. During the past year and a half I have treated a number of cases and recurrent winter coughs with Glyco-Heroin (Smith) and have obtained uniformly good results.

Example.—A. L. Salesman, aged 28. I saw this patient early in the spring of 1903. He is robust and of good habits. He consulted me concerning a constant cough which had troubled him for over a year. It was usually worse in the morning and after meals, and accompanied by expectoration of thick muco-purulent matter. Sometimes blood-stained, and especially so after a severe paroxysm. This circumstance preyed upon his mind considerably—he thought he had consumption. I learned that he had had a severe attack of acute bronchitis during the spring of 1902 and had been coughing ever since. Physical examination excluded tuberculosis. This diagnosis was chronic bronchitis, sequential to acute. The patient was immediately put on Glyco-Heroin(Smith) and the same hygenic measures ordered as in Case 1. Here again the financial condition of the patient precluded change of climate. In addition to the Glyco-Herion (Smith) the patient was given syrup of hypophosphites as a tonic. I did not see him again until last October. He then reported himself absolutely free from cough. He continued taking the Glyco-Heroin (Smith), and, during the present winter, has not experienced any return of the trouble. In this case a complete cure was effected by means of quieting the cough and stopping the irritation of the mucous membrane, in this manner allowing the restorative powers of the body, aided by the tonics and good hygiene, to accomplish a cure.

Example.—Miss R. M., aged 24, teacher. This lady had been coughing ever since she was nineteen years of age. At that time she had had an attack of rheumatism with a complicating bronchitis. After the acute condition had moderated, she continued to cough, the cough being very annoying in character, spasmodic and prolonged. After each paroxysm she was left in a state of exhaustion. During the attacks she urinated involuntarily. On examination she was found to have chronic bronchitis, aggravated by an exceedingly irritable condition of the respiratory tract. The mere odor of cigar smoke was sufficient to induce a paroysm of coughing. In treating this patient it was necessary to devote attention to the neurasthenia as well as the chronic bronchitis. She was placed on a diet and her mode of living regulated. Arsenic, strychnine and iron in pill form were given. For the cough, I ordered Glyco-Heroin (Smith). The improvement was marked and rapid. The general nervous condition became much improved and the cough grew much less severe and gradually lost its spasmodic character. At the present time it amounts to but little more than a clearing of the throat. This case, more than any other, demonstrated the excellent properties of Glyco-Heroin (Smith). The quick relief afforded was surprising and no more gratifying to the patient than to me.

A Dowieite leader at Toronto and Dowie's representative in Canada, says the Medical Record, was sentenced on January 8 by Judge McCrimmon to six months with hard labor in the Central Prison, Toronto (Can.), for "aiding, counselling and abetting one Marshall Harmon, of Victoria Corners, in neglect in securing medical assistance during his wife's last illness."

Spraying For Diseases of the Respiratory Passages.

Dr. David Walsh, senior physician to the Western Skin Hospital, London, writes:

Glyco-Thymoline was brought to my notice as an excellent lotion for nasal and oral sprays and washes. On due inquiry it was found to fulfil the two conditions usually recognized by medical men in the United Kingdom as vouching for the character, so to speak, of such a preparation. First, its advertisements were accepted by our three leading journals, the British Medical Journal, Medical Press and Circular and the Lancet. Secondly, its composition is not a secret, its formula being freely published. Under these circumstances, I determined to try the effect of this preparation in a few suitable cases. As a general antiseptic fluid that does not coagulate albumen, and is non-irritant, deodorant and practically non-poisonous, Glyco-Thymoline has clearly a wide range of usefulness. My own observations, however, have been practically confined to its use in the nose and mouth, with results that have proved satisfactory in every instance, especially in acute coryza, pharyngimitis, influenza, and septic conditions of the mouth.

He reports eight cases and concludes, "On this evidence it seems clear that in Glyco-Thymoline we have a good and safe application in all septic conditions of the month, throat and nose."

A certain Brooklyn young man is not so sentimental since he wrote to his sweetheart, who is a Virginia girl, that he always removes the stamps from her letters and kisses their backs because her lips have touched them. She replied that her negro mammy always licks her stamps for her.

The French Government authorities recently posted notices in every town and commune of France setting forth the evils of alcoholism, laying special stress on the danger of drinking distilled liquors.

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5

A Reveolution in Digitalis Medication.

Dr. A. Eulenberg, of Berlin, in Medizinische Klinik, No. 6, 1906, writes of "Intramuscular injections of Digalen" as follows:

Digalen (an equeous-glycerin solution of digitoxinum solution, Cloetta) has proved to be, during the last years, by far the best digitalis preparation. In fact, one may safely say Digalen is the only useful preparation of digitalis and is likely to produce a complete revolution in digitalis medication. When given internally it is superior to all the older forms of digitalis such as infusion, tincture, etc., in that its action is rapid yet safe; that it does not induce gastric disturbances; that it is well tolerated and readily absorbed. There are many cases, however, when one would like to exhibit the remedy in a manner which promises more energetic and prompter action than when administered per os. In such instances intravenous injections, first recommended by Dr. Kottmann of Naunyn's Clinic are advisable; subcutaneous injections frequently provoke irritation. Among others, Dr. F. Mendel in a brief monograph entitled "The intravenous digitalis treatment, a new therapy in cardiac affections" strongly advocates this method. He does so on the strength of having admininstered over 1,200 injections. In private practice it may sometimes be preferable to employ another method; one which appears to be no less effective. I refer to deep intramuscular injections which I have made quite often lately in cases requiring prompt and energetic digitalis action. I have had, for instance, splendid results in two cases of Basedow's disease with arhythmic pulse and heart insufficiency; and in arteriosclerotic myocarditis. I with recent endocarditis after acute articular rheumatism; in old valvular diseases with lack of compensation; in fatty heart with insufficiency; and in arteriosclerotic myocarditis. I can warmly recommend these injections wherever immediate digitalis action is required. They are easy to administer, are practically painless, and do not provoke local irritation. Digalen is best injected into the gluteal muscles (according to Haffter) or into the extensors of the thigh. The single dose is usually 1 Cc. (16.9 min) of the solution. No cumulative action being likely to supervene, the injections can be repeated as often as the special case requires it. As with all intracuscular injections—asepsis, a deep puncture (with a long needle,, not too fine nor too flexible) and slight local massage afterwards are, of course, de rigueur.

The Modern Management of Malarial Anemia.

One of the most obstinate forms of anemia with which the physician has to contend is

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that which succeeds malarial infection. This particular form of anemia is, unquestionably, due directly to the structural changes induced by the protozoon parasite.

While a mild form of anemia is a common, if not invariable, consequence of malarial infection, there is a severe type, termed malarial anemia, which not infrequently occurs. This latter variety usually responds slowly to curative measure; and, since its existence renders the individual a fit subject for recurring manifestations upon the slightest exposure, the importance of its cure cannot be too strongly emphasized.

The doctrine of the latency of malarial poisoning in the human body is rapidly gaining in popularity. Some authorities even go so far as to claim that a person who has once been inoculated with the malarial pronozoa never completely recovers.

Whether this be true or not, it is certain that the protozoon parasite does exert an influence which tends, for a great length of time, to lower vitality and render feeble the powers of resistence to renewed attacks. This is especially true in the case of women, children and persons of advanced age.

Recent investigators unite in ascribing the cause of malarial anemia to the liberation of hemoglobin from the red corpuscles in the blood vessels. The pigmentation resulting form this liberation of hemoglobin is one of the charteristics of malarial infection. And while the coloring matter may remain in the blood stream, it usually infilterates into the cells and neighboring tissues. The deposit of pigment is especially great throughout the tissue of the liver and spleen.

The thickening and softening of the mucous membrane of the stomach which always attends malarial infection, seems likely to contribute, at least to some extent, to the development of anemia.

In every instance the degree of the anemia is in direct ratio to the amount of the hemoglobin liberated from the red corpucles. And this fact explains the philosophy of effecting repair by the administration of iron, the hemoglobin-contributor.

Whether or not the protozoon parasite is ever completely eliminated from the economy remains an unanswered question. But it is now universally conceded that the protracted administration of iron does render the individual partly, if not completely, exempt from a return of malarial manifestations of an aggrated type. Far more so, in fact, than does quinine. Indeed, we have good cause to believe that iron does exert a destructive influence upon the malarial protozoa and increases the immunity of the individual.

While it is the chief aim of the physician to make up the deficiency of the hemolobin in these subjects by the administration of iron, it is distinctly important, coincidently, to increase the appetite and augment the capacity to appropriate the food ingested.

To this end, discrimination in the selection of the form of iron to be employed is vitally essential. The acid solutions of the drug are ineligible because of the fact that they cannot be engaged for a long period without harmfully affecting the secretion of the digestive juices and adding to the morbid state of the mucous surfaces of the alimentary tract.

Furthermore, the continued use of acid products of any sort are certain to diminish the alkalinity of the blood, thus depressing, to a very considerable extent, the nutritive processes. Then, too, headache which is an ever disturbing factor in these cases, is intensified by all substances of an acid reaction.

The strongly alkiline preparations of iron, while less objectionable than the acid ones, are open to fault for the reason that they induce constipation, and in this manner favor auto-intoxication.

By far the most effective form of iron in the treatment of malarial anemia is that which is neutral in reaction and available for immediate absorption. The organo-plastic form of iron, as found in Pepto-Mangan (Gude), certainly fulfils the requirements of the physician with greater promptness and uniformity than any other product thus far evolved.

This preparation—Pepto-Mangan (Gude)—is by all means the most potent hemoglobin-producing form of iron, and it undoubtedly surpasses other ferruginous products as an invigorator of the digestive and nutritive functions. These assertions are easily confirmed by the microscope.

It is also an accepted fact that Pepto-Mangan (Gude) does not induce constipation, and it seems to materially hasten repair of the mucous surfaces of the alimentary tract resulting from the structural changes incident to the malarial infection.

In short, Pepto-Mangan (Gude) is of inestimable value in the treatment of malarial anemia by virtue of its manifold advantages over other preparations of iron.

If this preparation is administered for the proper length of time, the individual gains substantially in strength, flesh, physical and mental energy.

It has been positively determined that the agent which uniformly and unfailingly neutralizes and counteracts the rheumatic virus must be a natural product and not a synthetic one.

Oil of wintergreen contains 96 per cent. of metyl salicylate and a recognized authority has stated that he had never seen cyanosis follow the use of the salicylates from the natural oil, but only when the synthetic acid was used.

In the administration of the salicylates it is of the greatest importance that the acid should have been derived from the natural oil of wintergreen, which is the only kind of salicylic acid used in Tongaline.

"Our observation of the medical literature indicates that Echinacea is being used far more than formerly.—J. A. M. A., April 8th, 1905."

Ecthol contains in each fluid drachm twenty-eight grains Echinacea and three grains thuja. It is put up in bottles holding 12 ounces and any physician who has not used Ecthol, can get a twelve ounce bottle for experimental purposes by sending 25 cents to Battle & Co. to prepay express charges.

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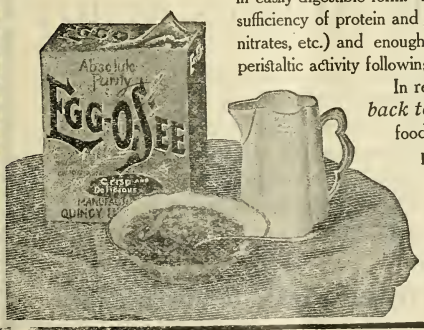

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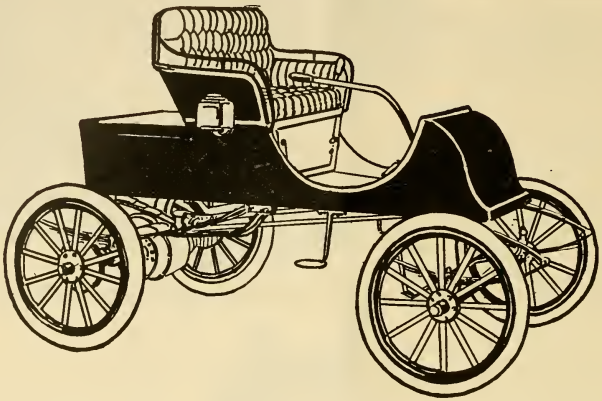

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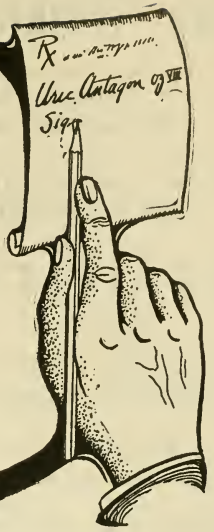

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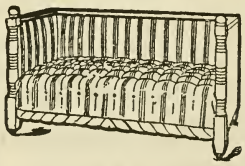

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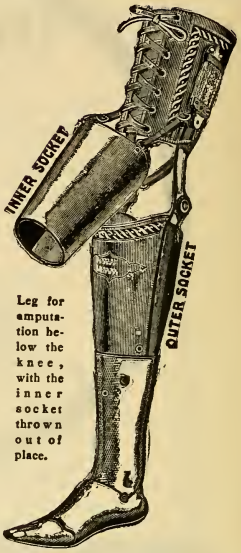

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The Charlotte Medical Journal.

VOL. XXVIII. CHARLOTTE, N. C., MAY, 1906. No. 5

Diverted Bile.

By W. Lowndes Peple, M. D., Richmond, Va.

Bile is secreted by the cells of the liver and should pass by way of the common duct into the small intestine, where it serves an important purpose in connection with digestion. Many conditions arise, however, which serve to divert it from its natural course into new channels, through which it arrives in unnatural environments. Both the presence of the bile in its abnormal surroundings and its absence from its natural locality give rise to symptoms so grave that death will ultimately ensue unless it can be turned back into the intestine. The problem then would seem to be one purely of mechanics.

So brilliant have been the results of latter day surgeons that we have all come to so regard it. We too often forget the evil influence of the bile itself in its unnatural location, and overlook the damage that it does to the blood and to the kidneys. It is to call attention to this apparently lesser phase of the subject that this paper is written, because I believe that a very large proportion of the deaths after gall tract operations are due neither to mechanical failure nor to sepsis, but to the effect of the diverted bile upon the blood and upon the kidneys, rendering them unable to withstand the further insult of an anesthetic.

After reviewing the localities into which bile may be diverted, the stomach, pleura, and peritoneum, I shall discuss its effect upon the blood and its influence upon the kidneys in the process of elimination.

The Stomach.—Bile gains access to the stomach by regurgitation from the duodenum, through a pathological sinus as a result of inflammation, or through an artificial sinus made between the stomach and intestine. Bile in the stomach of most individuals gives rise to distressing nausea and acts as a vigorous emetic. In others it seems to cause little or no inconvenience. To deal with the bile and prevent its regurgitation into the stomach was the most trying obstacle in the way of the pioneers in gastric surgery. Many an excellent mechanical result was marred, and the life of the patient made miserable by failure to accomplish this result.

The Pleura.—By rupture of a subphrenic abscess bile is often turned into the pleural cavity and appears on the dressings when the chest is opened. It is not here a complication of serious import, for when the abscess cavity fills in, the ruptured bile ducts heal, and the bile no longer escapes.

The Peritoneum.—The effect of bile upon the peritoneum is a question of the greatest practical importance to the surgeon. Though it is now known that bile, to obtain antiseptic properties, must first meet with the hydrochloric acid of the stomach, it was formerly heralded as nature's antiseptic without any qualification, and this too, in spite of the fact that very active and virulent inflammations took place in the gall bladder and gall ducts.

Cases are on record in which the peritoneum has filled up with bile from a rent in the common duct, so that frequent tappings were resorted to as in ascites, and yet no peritonitis developed. If clean incisions were made in healthy ducts these cases could doubtless be multiplied many times over, but the surgeon opens infected ducts, and when he liberates bile it is infected bile, and must be so regarded.

The Blood and Circulation.—Though jaundice may possibly occur without obstruction from excessive manufacture of bile, the obstructive variety is the type in which we are interested. Bile gains access to the blood by way of the lymphatics, and not by a water logging of the liver lobule with overflow into its central vein, as was formerly taught; for experimenters have found that if the common duct and the thoracic duct are ligated at the same time, no jaundice will follow.

Effect on the Corpuscles.—In cases of profound jaundice of three or more weeks standing, the red corpuscles are invariably reduced in number, the degree of anaemia being directly dependent upon the completeness of the obstruction and the length of time it has existed. It is well known that if bile be added to blood under the microscope, the red cells will be seen to swell and burst, and while it is probably never in the vessels in sufficient strength to accomplish so rapid a destruction, it is undoubtedly followed by a constant anaemia.

Effect upon Coagulability.—Blood that should coagulate in three to four minutes normally will require from eleven to twelve when marked jaundice exists.

Effect upon the Circulation in the Upper Abdomen.—In addition to the intrinsic injury done to the bloodf there is portal stasis and consequent congestion of the veins of the stomach, intestines, and omentum, and also those of the abdominal wall, due directly to the obstruction to the outflow of bile. Mechanical injury to the turgid viscera is followed by bleeding, which is pro-

longed by the inability of the blood to coagulate. The injured surfaces seem to weep blood that will not clot. Finney reports a death from this type of hemorrhage, and I myself have seen one.

The engorged mucosae of the stomach and duodenum, especially after handling, are prone to capillary bleeding, which is seen as the characteristic coffee ground vomit, sometimes before, often after an operation. The amount of blood lost in this latter manner is in itself trifling, but, if left in the stomach and bowels, it may give rise to alarming symptoms when it has been changed and reabsorbed.

Effect upon the Kidneys.—Bile is eliminated from the blood almost exclusively by the kidneys, and in so leaving the system gives rise to a nephritis, the intensity of which is directly proportional to the duration and intensity of the existing jaundice. The urine in a case of long standing looks like a 2% solution of iodine, contains a variable amount of albumin, hyaline, granular, epithelial and fibrinous casts, and numbers of renal cells, all stained a bright golden yellow.

The appended analyses are from the first three cases analyzed since this paper was written.

(1) Mr. C., age 40. Common duct obstruction, four months standing.

Albumin: ¼ gm. per 1000 c. c.

Casts: Hyaline, epithelial, fine and coarse granular, and fibrinous.

Diagnosis: Acute parenchymatous nephritis.

(2) Mr. H., age 40. Common duct obstruction, one month standing.

Albumin: ¼ gm. per 1000 c. c.

Casts: Epithelial and desquamated renal cells in enormous numbers.

Diagnssis: Acute desquamative nephritis.

An analysis made prior to onset of jaundice was negative.

(3) Mr. C., age 56. Common duct obstruction, two months standing.

Albumin: .2 gm. per 1000 c. c.

Casts: Mostly granular, a few fibrinous. The sediment, 1% by volume, was almost entirely of casts.

Diagnosis: Acute parenchymatous nephritis.

From the foregoing discussion and analyses, it can be readily seen that the jaundiced patient, when the jaundice is of long standing, presents many conditions which render him peculiarly unfit for surgical operations.

1st. His general condition is below par by reason of faulty digestion causing imperfect nutrition.

2nd. He is anaemic, and there is a marked diminution in the coagulating power of his blood. There is venous congestion of the entire field of surgical procedure, as well as in the mucosae of stomach and duodenum.

3rd. His kidneys always present evidence of parenchymatous inflammation, frequently so advanced that the irritation of an anaesthetic is almost certain to precipitate suppression.

When it is decided that any case presenting jaundice as a symptom is one for surgery, let the work be done promptly, before the symptom has wrought equal evil with the cause. *Operate before his constitution is impaired, while his blood is red and his kidneys are sound.* So much for prophylaxis, but the problem most frequently confronting the surgeon is, how to deal with the foregoing conditions when present. The answer is to *anticipate acute suppression.*

The patient, if his condition permit, should be put on a careful preparatory treatment for three or four days. The intestinal canal should be thoroughly evacuated. The kidneys should be flushed and the skin opened and encouraged to activity. To accomplish the first of these, Carlsbad salts, a heaping teaspoonful in hot water two or three times a day, can be used with advantage. Gastric lavage should also be practiced daily where there is nausea or vomiting.

The condition of the kidneys should be most carefully noted by daily analysis and measurement of the urine. Large quantities of water should be given, and in addition a pint to a quart of saline every six hours by rectum. Sulphate of sparteine, ½ gr., given hypodermically every four to six hours, while theoretically irrational, is not only a diuretic of remarkable utility, but is also a reliable cardiac stimulant. I have seen cases of marked suppression rapidly mend and recover under its administration. Strychnine, I am convinced, does harm, and I have never seen nitroglycerine, the rational remedy, do good. Under such preparatory treatment there should be a marked increase in the amount of urine, with at least a decided relative decrease in the amount of albumin and soluble solids. Hot baths or hot packs encourage the skin to activity, and assist thus in elimination. The diet should consist of readily assimilable fluids.

The operation should be performed quickly, with a minimum amount of the anaesthetic, for it is the anaesthetic, be it remembered, that is immediately responsible in nine cases out of ten for acute suppression. If such routine treatment be instituted before operation, or immediately after it in those cases that cannot wait, I believe the mortality in gall tract surgery can be im-

proved. Add to this gastric lavage, when coffee ground vomit is present, and I am sure of it.

1000 W. Grace St.

Malignant Disease of the Bowel; Chronic Intestinal Obstruction; Analysis of two Cases.

By G. Paul LaRoque, M. D., Clinical Assistant St. Luke's Hospital; Bedside Instructor in Surgery in Virginia Hospital; Lecturer on Practice of Surgery University College of Medicine, Richmond, Va.

The infrequency of malignant disease of the bowel constitutes no real reason for its failure of recognition. The difficulty of diagnosis and fatality of the affection are sufficient cause for a detailed report of every case observed. The following study of two cases, seen in the service of Dr. Stuart McGuire, demonstrates the possibility of diagnosis of such affections by a process of analysis, based on a systematic study of the signs presented in the individual patient; and the writer would urge this method of study rather than the unscientific method of guessing at the diagnosis by exclusion. The clinical records of two cases as made at the bedside, together with the results of the findings at the subsequent operations are herewith appended.

Case 1.—W. H. M.; male, age 52, white, admitted to Sheltering Arms Hospital Nov. 2nd, 1905. Referred by Dr. Jeff Nelson.

Family History.—Mother died of a second stroke of apoplexy(?) at 70; father of "dropsy" at 72; one uncle died of some liver(?) disease characterized for years by marked indigestion; no history of cancer.

Previous Personal History.—Always lived in Virginia and worked hard as a farmer. In early manhood (until 20 years ago) drank alcohol to moderate excess, occasionally becoming intoxicated. For the past 20 years has been a total abstainer. Until 15 years ago, used tobacco freely (chewing and smoking) since this time has used none. Always took meals rapidly, with imperfect mastication, and irregularly without regard to judicious selection of food. Rarely suffered with indigestion, though occasionally after eating much fat or chewing too much tobacco, would suffer "heartburn." Was always exceedingly fond of sweet food and indulged himself accordingly. His digestion was always good and bowels invariably acted regularly.

Had measles, whooping-cough, mumps (complicated with orchitis) in childhood; malarial fever 8 or 10 years ago. With these exceptions has been generally well. Examined and accepted 5 years ago for $1000 life insurance. Was never severely injured. Until 3 years ago considered himself healthy and his usual weight was 175 lbs. Married at 28, wife and children all healthy.

Present Illness.—Three years ago while in perfect health was suddenly, for no apparent cause, seized with severe "colicky" general abdominal pain, with no particular point of greatest severity. With this he was completely incapacitated, "doubled up" and "broke out in a sweat," though not collapsed. This pain subsided within 3 or 4 hours, upon application of hot turpentine cloths. At this time there was no nausea, no vomiting, no constipation nor diarrhea, no urinary symptoms. Next day was entirely well and went to work. About 8 or 10 months later was seized with a similar paroxysm of pain, though with prompt and vigorous treatment of the same kind this was of short duration.

About this time (2 or 3 years ago) suffered for some months with marked itching and redness about the anal and perianal region which from scratching became raw.

He dates his real trouble to Sept., 1904. At this time he began to suffer with moderate griping abdominal pain, occurring paroxysmally every few days; noticeable looseness of bowels (2 or 3 times a day); painful urgent defacation; bloody mucoid faecal evacuations and these would cause relief to abdominal-pain, and definitely follow this. (Previous to this his bowel movements had been one every day, regularly after breakfast and faeces were well formed). These symptoms continued all of last winter and sometimes the blood would amount to as much as one-half to a gill. It was always dark in color and occasionally clotted. The diarrhea was never confined to morning hours; would be more noticeable perhaps in the P. M. and was never observed while in bed.

During the spring of 1905 the obvious passage of blood ceased, but the faeces remained dark, soft and mucoid. During the past summer, noted that symptoms were generally less marked, though periodically, at irregular intervals, all signs save bloody evacuations would re-appear. He worked all summer though he felt below par, suffering with tired feeling, weakness and slowly progressive loss of weight.

Sept. 1905 suffered, rather suddenly, a recurrence of all symptoms including marked griping abdominal pain, rectal tenesmus, bloody mucoid diarrhea, and to these were added a chill followed by little fever, marked impairment of appetite, some impairment of digestion and conspicuous nausea, though until two weeks ago no vomiting. At this time had a second chill and recurrence of all symptoms, with, on one occasion, copious, yellow, bitter vomiting.

Since Sept. has been periodically in and out of bed about the house and farm, though he has not been well and has done only a little work. For the past 6 or 8 months has passed much foul flatus per anus, has suffered with marked borborygmus, and at no time has passed formed faeces. During his confinement to bed in Sept. he discovered a tumor in abdomen and found that he could voluntarily cause this to change position from left flank to region of umbilicus, by change of decubitus or by manipulation. He can note no positive increase in size since Sept. and the tumor has at no time been tender. Thinks he had lost about 25 lbs. in weight and correspondingly of strength since last spring.

Physical Examination.—Skin sallow, loose and pale; conjunctivae pale. Mentality, special senses, reflexes, bones, joints, lymphatics, and lungs entirely negative.

Distinct atrophy of one testicle.

Second aortic sound accentuated, arteries tough and pulse of low tension.

Abdomen soft, freely movable and not obviously distended nor tender. A distinct mass, tolerably smooth, hard and spheroid, is felt around the umbilicus apparently about the size of a large orange and dullness to percussion extends 3 or 4 inches in each direction about the umbilicus. By manipulation aided by lateral decubitus, this mass may be pushed to the left flank. The tumor can be easily palpated in any position and moves positively upward and downward with expiration and inspiration respectively. Lateral movement is also elicited and by manipulation the mass may be displaced from left flank to the right as far only as the right rectus muscle. No sickening pain nor tenderness are elicited by even rough palpation. When tumor is in mid-line there is a depression in left flank and the normal tympany of the descending colon is displaced inward to a slight extent.

Kidneys are not palpable. Left lobe of liver palpable in epigastrium, gall bladder not so.

Liver dullness extends about one or two fingers below the costal margin in mid-clavicular line and with tumor in mid-line is with difficulty separable from this by percussion. With tumor in flank the separation is distinct.

Splenic dullness is not enlarged and is easily separable from that of the tumor.

Ascending and descending colon are palpable and obviously thickened.

Stomach: without artificial distention, tympany reaches as high as 6th rib and as low as about 2 inches above umbilicus. Upon being distended with air through a stomach tube with a Davidson syringe, the tube passes without difficulty and the lower border of the viscus reaches the level of the umbilicus. Fundus tympany extends to the 6th left rib, and as far to the left as the mid-axilliary line. The pylorus is located about the outer edge of right rectus and level with umbilicus.

Gastric capacity, 48 ounces of water. When full, the lower border reaches about two fingers below umbilicus. No food residue, nor blood, nor tissue were evident to the naked eye in washings, and only a moderate amount of mucous. Chemical and microscopic examination of contents was not made.

Colonic distention was not productive of any effect on the size, position or prominence of tumor.

Sigmoidoscopic Examination.—Instrument was introduced with no difficulty for 6 inches. At this point distinct resistance was felt and pain caused; by gentle pressure and lateral deviation, the resistance was overcome and the instrument passed 14 inches without difficulty.

Mucous membrane is red, vessels injected, but no ulceration neoplasm, stricture, excoriations, free blood, hemorrhoids, fissue, nor fistualae were seen.

Faeces: soft, watery, foul odor, tarry consistency, very dark, almost black in color, and contain mucous in great excess.

Urine shows trace of albumen, no sugar, few granular casts.

Analysis of Record.

The family history shows nothing having any bearing on the case.

From his previous personal history it is obvious that for years during early manhood, the patient very positively insulted his digestive apparatus by excessive indulgence in alcohol and tobacco, and by quantitative and qualitative dietetic errors. In spite of this, however, he was not a victim of obvious indigestion nor any impairment of health, so that even at 47 years of age was accepted in a reputable company for $1000 life insurance, and until 3 years ago considered himself in excellent health.

The present trouble obviously began at the age of 49 with a paroxysm of severe intestinal colic; and this symptom has repeatedly recurred.

A "causeless" colic in one of 49 years of age is always a serious symptom. In this case there was doubtless some invagination of the bowel incident to the presence on its wall of a polypus.

Pruritis ani is most commonly, in men, the result of irritating rectal evacuations. Foul, bloody, irritating, mucoid evacuations with progressive emaciation in a man past 50 years old denote carcinoma of the bowel. Rectal tenesmus indicates location in the large intestine.

Since Sept. 1905 (2 months) he has had added the symptom complex of incomplete intestinal obstruction, and during his confinement to bed discovered in his belly a tumor, which upon examination possesses the characteristics showing obvious attachment to the splenic flexure of the colon.

In addition to the fact that all of this man's symptoms were referable to the large intestine, perhaps the most positive sign of the tumor being attached to this part of the canal, is the fact that upon moving the tumor to the middle line the normal tympany of the descending colon was always correspondingly displaced. The obviously thickened colon, together with marked borborygmus and exaggerated peristaltic sounds further indicate an obstructive lesion in the bowel.

As to differential diagnosis in this particular case little need be said. The absence of gastric signs together with the location of the tumor to the left of the middle line almost exclude carcinoma of the stomach. The gastric dilatation was little more than would be expected in a man of his age and previous habits and can easily be accounted for by the secondary or concomitant gastric catarrh attendant upon most chronic lesions of the bowel.

As to lesions of the spleen and kidney, these can be excluded by the fact that colonic distention failed to diminish the area of dullness caused by the tumor. There are no urinary symptoms.

Diagnosis.

Chief Affections.
- Carcinoma of Splenic Flexure of Colon.
- Chronic Incomplete Intestinal Obstruction.
- Chronic Concomitant Colitis.

Coincident Affections.
- Secondary Anaemia.
- Gastric Dilatation.
- Chronic Interstitial Nephritis.
- Cardio-Vascular Fibrosis.
- Atrophy of one Testicle.

At operation, performed by Dr. McGuire, the tumor was found located in the splenic flexure and involving also the descending and transverse colon. There were no lesions of the surrounding tissue and the mass the size of a croquet ball was delivered through an incision at the left border of the rectus muscle; it was completely removed and an easy end to end anastomosis with needle and thread was performed. One large gland located in the mesentery was removed with the V-shaped portion of this structure and the abdominal wound closed without drainage.

Examination of the tumor by Dr. E. Guy Hopkins shows it to be an enormous cauliflower-like growth which upon microscopic examination is shown to be a cylindric celled adeno-carcinoma.

Convalescence was absolutely uninterrupted and at the end of 3 weeks the patient was discharged without symptoms.

At the end of 4 months since the operation, the patient is apparently perfectly well, gaining weight and feels in better condition than for years.

Case 2.—M. M.; male, age 12, admitted to St. Luke's Hospital Feb. 12, 1906. Referred by Dr. William Sayers.

Family History.—Father and mother, 3 brothers and sisters healthy; paternal grandmother died of phthisis.

Previous Personal History.—Had measles a few years ago, tonsilitis 5 years ago while other members of family had diphtheria.

Was considered a strong boy, though for some little time recently has been considered "puney" and has suffered occasional attacks of vomiting from "sick stomach" and has lost some flesh.

In the late summer he was struck with moderate force on his abdomen by a base ball bat.

Present Trouble.—His mother dates his sickness as beginning 3 weeks ago. At this time, after getting wet and allowing his clothes to dry on him, while at school he began to suffer with griping abdominal pain, more marked in the left abdomen. With this was marked headache and gastric derangement; went home from school looking positively sick. At this time, as a result of prolonged bladder distention, he was unable to void urine and had to be catheterized. For past 3 weeks he has remained at home, in and out of bed, and has suffered recurrent attacks of vomiting and nausea, griping abdominal pain, obstinate constipation, necessitating an enema nearly every day. Rectal injections and defecation are painful. His mother has noticed that the stools are foul, liquid, and contain an excessive amount of mucous though she has noticed no blood. She has noticed especially for the passage of worms but none have been passed.

He has had no signs referable to urinary organs; appetite is good; no fever except once, when it was 101. He has lost flesh very markedly.

Physical Examination.—Abdomen distended, freely moveable and save in the left inguinal region non-tender. Palpation discovers a hard mass apparently about the size of a cocoanut, located in the hypogastrium and having apparently an attachment at the left side of the pelvis. The mass is non-tender save over the region of the sigmoid; feels nodular and does not fluctuate.

There is a slight range of mobility by palpation but respiratory movements are not noted. The ascending, transverse and descending colon are palpable and over these regions is elicited a markedly tympanitic note. The tumor is dull to percussion. There is no abdominal rigidity. Peristaltic sounds are exaggerated; they are audible without placing the ear on the abdomen.

The skin all over the body is loose and dry. Over the skin of the abdomen there are signs of local applications, said by the mother to be due to antiphlogistine.

Heart and lungs normal. Liver dullness is not pushed upward; splenic dullness is not demonstrable. Bones and joints negative. Lymphatics in both groins are palpable but not obviously enlarged. Both testicles are in scrotum; prepuce is redundant and its orifice constricted.

Rectal Examination detects a hard mass in the gut and the pelvic cavity is almost entirely filled.

Faeces: obtained by enema are liquid, dark brown, very foul odor, and contain an excessive amount of mucous and reddish brown shreds.

Urine: dark amber, 1022, strongly acid, transparent, mucous, no albumen (doubtful trace is reported at previous examination). Amorph. urates, calcium oxylate crystals, few leucocytes, no red cells, a few hyaline casts are reported.

This case presents the following basis for diagnosis:

In the first place while the mother dated his illness as of only 3 weeks duration, he has undoubtedly been suffering with gastro-enteric disturbance and gradual loss of flesh for at least 2 or 3 months.

Three weeks ago, however, was doubtless the onset of signs of intestinal obstruction and this has been positive and almost complete.

The foul, spurius, liquid and mucous passages denote concomitant colitis, and the progressive emaciation greater than is caused by digestive impairment alone, suggests malignant disease.

These together with an abdominal tumor obviously attached to the gut in the sigmoid region, constitute a basis for diagnosis of malignant disease, and at 12 years of age this can be only sarcoma.

Diagnosis.

Chief Affections.

Sarcoma of Sigmoid.
Chronic Incomplete Intestinal Obstruction.

Coincident Affections.

Dilatation of Colon.
Concomitant Colitis.
Secondary Anaemia.
Congenital Phimosis.

At operation, performed by Dr. McGuire to relieve obstruction and if practicable to remove the growth, it was found that the pelvis was filled with a mass reaching as high as the umbilicus and bound by dense adhesions to everything with which it came into relation.

An interesting incidental feature of this case was the presence in the small intestine of numerous long round worms visible through the wall of the gut. The obstructing mass was not made up, however, of these offenders.

Careful examination confirmed the sarcomatous nature of the growth whereupon an artificial anus was made in the usual way, using, however, a strip of skin instead of the usual glass rod, upon which to support the gut. The latter was opened 2 days later and the patient was relieved of the signs of obstruction. The tumor, however, continues to grow and will of course necessarily be fatal.

In conclusion a few words summarizing the cardinal characteristics of malignant diseases of the bowel may not be inappropriate.

In the early stages the subjective signs are referred chiefly to the intestinal tract. There is always concomitant inflammation of this structure due to the action of micro-organisms normally present on its mucous membrane, feebly resistant incident to the disease process. A patient habitually constipated notes generally a "causeless" diarrhea and with this there are recurrent paroxysms of intestinal colic. These symptoms call for a searching examination for a serious local cause.

When the rectum and sigmoid are involved, the diarrhea is more noticeable in the morning hours and the higher the lesion the less strikingly is this symptom noted as confined to this period of the day. If the lesion is above the sigmoid, morning diarrhea may be absent. This is shown by the first case here cited, in which the splenic flexure was the seat of the disease. This sign is always absent during sleep.

Rectal tenesmus signifies the location of the lesion in the lower 8 to 12 inches of the canal.

Diarrhea frequently alternates with obstinate constipation, whatever the location of the lesion, but until obstruction is produced, this symptom is easily overcome.

Gastric symptoms are inversely in proportion to the diarrhea.

In all cases, the intestinal evacuations are excessively foul, semi-fluid in consistency, containing an excessive quantity of mucous, and blood is present varying in quantity from such a small amount as to necessitate

chemical tests for its demonstration, to obvious exhaustive hemorrhages.

These signs in an individual past 40 years old, when of more than transient duration and manifesting a tendency to recur without provocation are of serious significance. In children they are often overlooked as shown by the second case here reported in which the mother failed to recognize illness in her child, until the intestinal obstruction became almost complete.

When the rectum is involved, the patient and sometimes the physician, attribute the signs to hemorrhoids. Every case of bleeding from the bowel developing in one after the age of 35 years should call for sigmoidoscopic examination.

When cachexia occurs, the disease is generally past the curative stage.

Pruritis ani is a significant symptom and until irritating evacuation can be excluded as a cause, a neurogenous origin of this symptom should not be presumed.

This symptom invariably calls, in men, for a scrutinizing examination for the presence of some irritating ejection from the bowel, and in old people is a significant sign when associated with colliquative, foul, mucoid diarrhea.

Frequently recurring intestinal colic attended and relieved by urgent, foul, bloody, mucoid diarrhea and obvious hemorrhage from the intestinal canal, when coupled with progressive weakness and emaciation in an individual 50 years old, practically indicate, we might say, only one thing, namely, cancer of the bowel.

Finally an abdominal tumor may be discovered, but save when the lesion is beyond the reach of the longest sigmoidoscope, the affection should be recognized before the tumor appears. The characteristics of tumors at the sigmoid and at the splenic flexure are perfectly illustrated by the above two cases.

At the hepatic flexure and at the caecum the intestinal attachment of such tumors is more difficult to demonstrate. In the latter region the mass may be difficult to differentiate from that produced by an appendiceal abscess. Indeed these two affections may be combined since it has been shown that a goodly number of cases of chronic appendicitis in individuals past middle age have for their origin carcinoma of this structure. The differential diagnosis as to the exact origin of the tumor in the region of the hepatic flexure must take into consideration especially, gall bladder tumors, mobility of the kidney, pyloric and pancreatic enlargements, and it is not the purpose of this contribution to present a detailed study of such differential diagnosis.

506 East Grace Street.

Epithelioma: Its Early Recognition and Treatment.*

By E. M. Hutchens, M. D., Boonville, N. C.

Mr. President and Gentlemen of this Society:

My object in bringing this brief paper before you is not to bring before you some new fangled idea or untried theory, but I hope to present this subject in a brief way so that no one of this little band of workers for the relief of humanity will ever make the same error and meet with the humiliating experience of your humble fellow-practitioner.

After prosecuting my studies at College and entering upon this, one of the nobler and loftier professions of life, I was confronted with three or four cases of epithelioma of the face. These patients consulted me about their troubles, not with the expectation of carrying out my method of treatment, but their chief object was to get my opinion of diagnosis. Of course I examined the cases and made diagnosis, and I advised wide extirpation with the knife. They were satisfied as to diagnosis, but did not approve the plan of treatment. They every one knew of an old man across the mountains, an old quack doctor, who did not cut them out, but eat them out with some kind of medicine. I was not the only physician these patients consulted—they consulted every physician they came in contact with until they were satisfied with the diagnosis. Then away to the old quack doctor across the mountains they went. The next time I saw these patients their epithelioma was gone and there remained nothing but a little cicatricial tissue which disfigured the face but very little.

Now what was the effect of these cases in the various communities in which these patients lived? The impression was this: That this old quack doctor cured these patients that a half dozen or dozen reputable physicians didn't know how to cure, or at least failed to cure. It gave the quack a great reputation at the expense of the general practitioner. There is an inclination on the part of the American people to give the quack credit for having transcendent knowledge over the regular medical profession and just such cases as these are all the proofs they want to bear them out in their arguments for the quack.

I am glad to say, gentlemen, that the empirical quack is retreating before science and civilization. Not long since there were a great many quack doctors in this country. Now there are but few and they are mostly in the ignorant communities where there is but little pay. What has driven this class

*Read before the Yadkin county Medical Society April 2nd, 1906.

of healers out of business? The rapid growth of science and organization of the profession, examining boards, &c. I think it should be one of the primary objects of this Society to drive every quack and midwife out of our field. If I knew that the reading of this paper would prevent one case of epithelioma from falling into the hands of some quack I would feel amply remunerated for this my first effort before this Society.

An early diagnosis is very important in these cases. In all the cases I have seen they were of the face. In their incipiency they generally occur as a little fissure, wart, or nodule. The latter is always easily recognized. The two former are more likely to lead to error in diagnosis, but by watching them closely they may be easily recognized. Now, as to the treatment of these tumors, of all the various treatments, I shall present to this Society but one, and that is a very old one, indeed. This treatment got into the hands of the secret quack in the 16th century and remained there as a secret nostrum until the 19th century. Some time in the 19th century this nostrum, known as cancer powder, was purchased by one Jean Baseilhac, a Frenchman, for the sum of 3,000 livres. A livre is a French coin, the value of which is 18½ cents. This amount then in American money would be about $555.00. Baseilhac published the constituents of this great secret cancer powder. It consisted of Arsenious Acid, Cinnabar, Burnt Sodium, and Dragon Blood, whatever that is. I think it is a vegetable preparation, probably some variety of calomus. However, that is immaterial, as the one great constituent of this powder which has given it its world-wide reputation is the Arsenious Acid, or white arsenic, as it is sometimes called.

Hebra and a great many others have modified this powder. Hebra's application consists of 5 grs. Arsenious Acid, 15 grs. of Cinnabar, and 2 drachms of simple ointment. The preparation that is most generally used is that of Alexander Marsden, of London He leaves the Cinnabar out. Simply makes a paste of 2 drachms or parts of Arsenious Acid and 1 of mucilage of gum acacia. Prof. A. R. Robinson, of New York, uses equal parts of Arsenious Acid and pulverized gum arabic or acacia, using enough water to make it of the right consistency, which should be just thick enough not to run.

We have the remedy, now a few words in regard to its application. In order to be successful we should apply our remedy during the stage of proliferation. These growths are a mere mass of proliferating epithelial cells, which if let alone later on break down. Then we get metastasis through the lymph channels,—at this stage we are not so likely to be successful in our treatment, therefore it is of the utmost importance that we recognize the condition early during the stage of proliferation and commence our treatment at once. Various physicians have various ways or methods of applying the paste. The main thing to guard against is the spreading of the paste. You don't want the paste to come into contact with any but the abnormal tissue. If the epithelioma is about the mouth or eyes the utmost precaution must be taken to not allow any of the acid to enter these cavities or organs. If so strong a preparation as Marsden's is used the application should not cover a surface more than 1 inch square. In most cases 3 applications will suffice. Make application, at the end of 24 hours remove and make second application, after 24 hours more from second application remove and make third application, at the expiration of 24 more remove the paste and apply bread and slippery elm water poultices. The object of the poultices is to remove the great swelling that the paste produces and hasten sloughing. In from one to three weeks the entire epithelial growth sloughs away, generally en masse, leaving a healthy granulating surface.

When the healing is complete, if the case is taken early before the growth gets much size, the patient's face will be disfigured but very little, only a very small scar will remain. One more thing I should have mentioned, in commencing treatment always use some kind of cautery before applying paste, caustic potash, actual cauter or any cautery that may be at your command to break the integument of the skin, so that the arsenious acid can penetrate down into the diseased tissues.

The above plan of treatment has been highly successful in the hands of Rhoe, of Baltimore, Cattell, of Philadelphia, Robinson, of New York, Marsden, of London, and many others. As for myself I have used the treatment in but one case only. That was in a lady about 38 or 40. Epithelioma of the face on right side of nose up to within ¼ inch of the eye, about the size of a blue bird's egg, nodular variety. I broke the skin with the actual cautery, applied first Robinson's paste equal parts arsenious acid and gum arabic pulverized made up of the proper consistency. In 24 hours removed the Robinson paste and applied the stronger Marsden's paste, in 24 hours more repeated the Marsden's paste, after 24 hours more removed the paste and applied the bread and slippery elm water poultices. The treatment in my case was highly satisfactory; did not get any of the

paste into the patient's eye. In about two weeks after the removal of the paste the whole diseased mass sloughed away and left a healthy granulating surface. That has now been about 12 months ago, and there remains nothing but a small scar which can be seen only at close range and inspection.

Gentlemen, I believe if we will adopt this plan of treatment and give these patients a little time and care we will strike a death blow to the cancer quacks, enhance our reputations, fill our purses, and save some lives and a great deal of suffering of this class of patients. I, for one, have much confidence in the remedy. Pardon me gentlemen if I have been tedious.

Do Healthy Individuals Incur any Greater Degree of Liability of Contracting Tuberculosis in visiting Resorts Frequented by Patients Affected with Pulmonary Tuberculosis than Elsewhere.*

By J. Howell Way, M. D., Waynesville, N. C., Member North Carolina State Board of Health, Secretary North Carolina State Medical Society, Member American Medical Association, Member American Public Health Association, Member Association Surgeons Southern Railway, Secretary Tri-State Medical Association, Ex-Member and Secretary North Carolina State Board of Medical Examiners, &c., &c.

More than two decades have passed since Robert Koch discovered to the world the causal relation of the tubercle bacillus to pulmonary and other forms of tuberculosis. During these years the investigations of an ever alert medical profession have added much to our knowledge of the nature, prevention, and treatment of the disease; yet the practical fact remains that mistakes have been made, false postulates promulgated, and advances made in certain directions from which intelligent scientific study demands retreat—a state of conditions not at all surprising, nor discouraging to those of us who are more interested in establishing truth, than in defending untenable positions because assumed primarily by those having authority, and today regarded as demonstrated facts by the majority of medical men, and as fondly cherished by the masses of educated laymen.

Every practitioner of medicine much in contact with a cosmopolitan clientele is profoundly impressed with the extent of the tuberculephobia with which the masses of the people have been indoctrinated, and the popularity of a health resort frequented by tubercular patients like the Adirondacks, or the mountains of Colorado, or of Western North Carolina, or the resorts of lower altitudes like Aiken or Thomasville, or Southern Pines, is subjected to attacks which when one hears them he will unconsciously turn and ask, is the popular dread of becoming infected with pulmonary tuberculosis from casual contact with a case of the disease only in part a groundless apprehension or does such extreme danger really exist?

Residing as I have in one of the resort towns of the Carolina mountains within a few miles of the well-famed city of Asheville, in a climate where literally thousands of tuberculous patients have breathed anew the breath of a restored and lengthened life, and hearing daily from transient visitors such expressions as, "I did not dare stop over in Asheville overnight," "I would not stay there under any consideration, for it would be taking chances with my life," "My home physician who is one of the best doctors in the country told me to be very careful when I went to Asheville," or other similar extreme statements—naturally with a man who wishes to be professionally honest with himself and his patients, the question will come, is it not time a note of wholesome warning was sounded to the profession relative to farther teaching of extreme doctrines not warranted by the facts?

While I appreciate fully the fact that modern textbooks of medicine, pronunciamentos of boards of health, essay upon essay in all the journals from the pens of virile writers, tome upon tome of literature written about tuberculosis for the express purpose of enlightening the non-technical public, all constantly and persistently with few exceptions continue to inculcate the doctrine of the extreme danger of tubercular infection from casual contact with the patient with tuberculosis or his environment; yet I am fully convinced the pendulum has swung too far. Both doctors and laity have learned a part at least of the lesson in tubercular prophylaxis, "not wisely but too well." And when one sees and recognizes the pertinent facts that the extreme views upon this subject are not only seriously disturbing to the mental comfort of many people, but positively conflicting with the real facts, it is evidently time for those of us who are convinced differently, to carefully enquire as to the real situation and if an error has been made (by both physicians and laymen) let us hark back to the truth.

In the short and imperfect consideration which I propose giving this subject today, I shall only mention for your thoughtful consideration certain suggestions without attempting to present a complete or systematic study of the various phases of this most vital problem, making as a preliminary note

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the statement that in my opinion, the prevalent fear lest our health resorts for tuberculosis become hot beds of virulent infection for the healthy is entirely an erroneous one and unjustifiable on any scientific consideration of the subject. And farther emphasizing the assertion that when the present wave of tuberculophobia shall have passed and the doctors, with the people whom they have mistaught, come to their senses again these facts will be generally recognized.

The tubercle bacilli is a non-metile vegetable parasite devoid of capacity to reproduce itself outside the living body, and while a consumptive freely and indiscriminately expectorating, without regard to the lodgment of his sputum, will disseminate millions of bacilli every day in his environment, yet it may well be questioned if even indiscriminate expectorating (leaving aside certain other considerations) is as pregnant with dangerous infective possibilities as we have been taught, and taught, to believe in former years. While at the present time I would not advise, or personally favor, any degree of relaxation of the very excellent restrictions which are thrown around the expectorating of tubercular patients, or the eminently proper disinfection of their apartments, as is currently practiced in our more enlightened health resorts, yet in the light of recent studies it can but be evident that the infective possibilities even here have been greatly magnified. It has been repeatedly shown of recent years that even when deposited in a fairly large mass of mucous the T. B. exposed to direct sunshine are destroyed in two hours exposure, and in strong daylight only a few hours longer are requisite for their destruction. This being the case, the T. B. which expectorated on the open ground, are wafted away in the atmosphere while still vital are very few indeed. And if we should take the trouble to calculate a moment, and recalling the constant changing of the atmosphere, especially in our mountain resorts with their ever present breezes, and figure the cubic quantities of air in a street or any given open, out-of-doors space, and this constantly changing, we will naturally arrive at the conclusion that the liabilities of infection here are very small indeed. The elaborate series of studies of Drs. Flick, Ravenel, and Landis, of the Phipps Institute, which were presented in detail during the recent ten days session of the Pennsylvania Society for the Prevention of Tuberculosis held only last month are very instructive. Briefly, their investigations covered very complete studies of street dust from crowded city streets where many cases of pulmonary tuberculosis were known to pass daily, even hourly, without any restrictions whatever as to expectoration, and such studies demonstrated an absence of active vital T. B. in such street sweepings. The T. B. is essentially a house plant, and tuberculosis is essentially a house disease, its exciting germ does not live, thrive, prosper, or enjoy any of the functions of life except in darkness, or at least the absence of good light, and in the presence of filth or at least a lack of ample ventilation and thorough cleanliness.

The collective reports made in 1905 by Hueppe of all sanatoria for pulmonary tuberculosis in the German Empire and extending over a lengthy period of years, showed that out of 2,020 attendants, including physicians and personal attendants as well, employed in these institutions, only 11 cases of tuberculosis developed. If the dangers of infection from close contact with the tubercular cases were a great one, assuredly we should have a much larger percentage of the disease in those so closely associated, with exposure to contact, and to particles of sputum in coughing instead of an actually less ate of infection than in the community at large! Gardner, of Colorado Springs, in a recent paper emphasizes the fact that as a result of careful systematic search for cases of pulmonary tuberculosis developed at Colorado Springs among the local population ranging from 15,000 to 30,000 during the 20 year period covered by the investigation, only 20 cases, or one a year, could be found as having developed there among the natives or visitors—a truly remarkable state of affairs when we recall the fact that there must of necessity be a very considerable element of the permanent population of the city made up of persons who were at one time of their lives the subjects of the disease. Baldwin has shown most conclusively that the danger from infection at Saranac Lake is very small, a study of the records of the place for 15 years ending in 1905 showing only 20 cases as having occurred among the residents in that time: and it is more than likely that most towns of similar size in the country would have shown as many or more non-imported cases in this period of time—towns which are not frequented annually by thousands of tubercular patients. Dr. Holland, of San Moritz, stated in 1905 that he "is positive there has been no increase in the development of tuberculosis among the native population due to the infection from the large crowd of patients who throng that popular European resort." The official registration of deaths in the Davos Platz district from 1876 to 1900 exhibited the interesting fact that during the 25 years the total number of cases of pulmonary tuberculosis among the native population of Davos Platz was 38 persons—and this, too,

in a total population of nearly 10,000! Dr. F. M. Sandwith, of Cairo, Egypt, reports as follows: "There is no special evidence that tuberculous invalids sent to Egypt have become sources of infection to the native residents!"

Coming nearer home to the mountain resort section of Western North Carolina, the reports made to me personally from leading specialists in tubercular affections in Asheville tend to establish the same state of facts. The official records of Asheville (quoted to me by Dr. Burroughs) "show the deaths from pulmonary tuberculosis among the native population for many years past to be less than one-fourth of one per cent!" And he confidently adds, "I am convinced the safest place for security against tubercular infection is a resort of this kind where the proper sanitary restrictions against contracting tuberculosis are enforced." Dr. Von Ruck in a sanatorium experience of 20 years says he "has never seen a single case of tubercular infection occurring from personal contact with patients on the part of employes or physicians," and further adds his belief "that strangers going into a city or remaining there any length of time, although there may be tubercular patients there, have in fact nothing to fear!" Additional confirmatory testimony I have from Drs. Miner, Ambler and Cotten, and Dr. Weaver (himself a native to "the maner born") advises me that "Asheville has a lower death-rate from tuberculosis now than 30 years ago and the actual percentage of cases of tuberculosis among the native residents is less than it is in the rural districts of the county!"

Numerous other letters are by me as I write from other gentlemen of large practical experience in resorts frequented by patients with pulmonary tuberculosis, and in the main the general tenor of opinions are to the effect that under ordinary conditions there is absolutely no danger to healthy natives or visitors from the presence of cases afflicted with tuberculosis, that the possible dangers of such contact had been greatly overestimated by both profession and laity, and without exception no one writing had ever known of a case becoming infected from such contact!

Now, possible objection may be made to this form of investigation by securing personal opinions on the ground that individual prejudices in favor of local interests may have exerted an influence in shaping some of the expressions, or as Cornet some years since bluntly expressed it "Natives in admitting cases of infection imperil their most precious interests." It will be remembered, however, in this connection that men like those quoted have opportunities for the making of careful observations relative to such questions which would naturally give great weight to the value of their studies, I of course admit, in view of the prevalent belief in the virulency of the infection of pulmonary tuberculosis, that it is a little remarkable that from leading health resorts in both Continents, frequented by thousands of patients suffering with consumption the reports should so uniformly show that infection to people constantly seemingly especially exposed to such infection should be so extremely limited. Certainly it is a fact that should be heralded to the professional world that the average ratio of cases of pulmonary tuberculosis as to population at large is decidedly less in the popular health resorts for pulmonary tuberculosis where thousands have been thronging annually for a generation now, than in the average city or town where there are considered to be relatively few cases of the disease and where people rarely even think of there being any danger of a tubercular infection. From a consideration of these opinions I believe we are amply warranted in asserting a belief that probably the safest place from a possible tubercular infection is to be found at a first-class health resort frequented by tubercular patients, but where the residents are fully alive to the modern principles of preventing disease by rational living, proper ventilation and correct hygienic methods of living.

Now, admitting the bonafide existence of a specific infectivity of the tubercle bacillus to produce tuberculosis (and in this I take it we absolutely all can but agree!), it is pertinent to enquire why persons residing permanently in, or visiting health resorts frequented by the tubercular, are so little liable to infection? In all probability there are several causative factors at work. Primarily it should be borne in mind that infection with T. B. occurs most often at a period really far remote from the development of symptoms which command the attention of either patient or physician. Tuberculosis is tediously slow in its development, and the tendency of recent thought is to view it as taking place in the majority of instances in early childhood, probably through the lymyhatic tissues of the pharynx, and barring those individuals who furnish so great a proportion of the pulmonary tuberculosis cases of our great cities, living under extremely unsanitary environment (the so-called "submerged tenth!"), infection in an adult is unquestionably the exception. Oft times the cases which may at first seem to have been instances of recent infection, will on a more critical study prove to have been patients where the T. B.

since early childhood have been slowly working their way from tonsil to lymphatis, with little disturbance of the health equilibrium, until the influence of some vitality depressing factor determines the sudden manifestation of tubercular activity exhibited throughout the whole physical organism. Such cases are too often erroneously classed as re-infections from without the body, when in truth it has been merely a latent infection called into activity.

A place which is enabled to establish a reputation as a health resort for the tubercular is primarily and essentially a place so situated as to possess to a maximum degree those qualities which are regarded as conducive to health and longevity, and in only a minimum degree the influences which undermine or lower vitality. In other words health resorts for tuberculosis are as a rule situated where there is marked dryness of the soil, with high, or moderately high, altitudes, and in a relatively dry climate, or where there is to be found the maximum comparative amount of sunshine associated with the minimum average atmospheric humidity. These conditions afford an environment intrinsically inimical to the life of the T. B.; hence the ordinary individual, be he resident or visitor, naturally responds to the invigorating and tonic influence of the climate and an improved metabolism renders him less liable to infection in the health resort than he would be in climates of the average sunshine and humidity.

Then, too, there is naturally and unavoidably at the health resort a far greater degree of consideration paid by all classes to health laws; there are better hygienic regulations in force, indoor occupations, both as regards work and play, are relatively far less in evidence than elsewhere, there is an absence of the over-crowding, over-heating with deficient ventilation, which latter defect I have noted in every large city I have ever visited, (and it has seemed to me to be by no means confined to the domiciles of the "submerged tenth!"). The attention of the people at large has been more frequently and forcefully directed to the importance of open houses and fresh air, and a relatively far higher standard of both public and private sanitation exists in the modern health resort than in the average other prosperous city of today.

In our health resorts for tuberculosis the average housekeeper or hotelist actually often becomes more proficient in sanitary science for practical purposes than some practitioners of medicine I have known! That such a state of improved public and private sentiment and practice should exist is but to be expected, for with progressive doctors and qualified nurses constantly keeping before the citizens of the community the necessity and advantages from a health view point of extreme cleanliness, thorough and frequent disinfection, sunlight, fresh air, good wholesome food, reasonable hours for labor with ample time for recreation,—into this type of social atmosphere the resort visitor is initiated and he usually readily enough responds to the subtle influences of an environment where the daily talk is not of crops, the price of cotton or other commodities, or stocks and mortgage bonds, or interest rates or profit-sharing, or manufacturing, or political, or commercial enterprises; but on the other hand the uppermost theme impresses him as being health and how best to promote it, of good appetites with improved digestions, of rides, drives, walks, recreations, pleasant diversions, recuperations, physical improvements, free breathing, &c., &c. As a matter of fact I have often questioned if the average transient at a health resort for tubercular patients did not after hearing so much talk along hygienic and sanitary lines, especially if he is a superficial observer and quick to arrive at conclusions, form the opinion that so much consideration on the part of the majority of individuals he comes in contact with from his liveryman up to his doctor, really betoken a dread on the part of the people of infection. In this respect it is possible at times the great attention these vitally important matters receive in the modern health resort, are sometimes undoubtedly ascribed to an improper *motif*, when the real facts are that the doctors have infected the masses of the people with a degree of enthusiasm upon these subjects which make many of them real evangels for the restoration of health and the prevention of disease.

Briefly summarizing permit me to present the following conclusions:

Non tubercular individuals necessarily incur no danger of infection with tuberculosis in visiting or residing at modern health resorts frequented by patients with pulmonary tuberculosis.

There is less danger of contracting pulmonary tuberculosis in a well regulated modern health resort than elsewhere.

Health resorts for tuberculosis are almost invariably places where it has been originally noted that the percentage of deaths from tuberculosis among the natives was remarkably small.

The climatic and other local conditions which originally permitted so small a development of tuberculosis among the natives continues to render them relatively (not absolutely) immune, and as well to beneficially impress the visitors to such resort.

Considered in the light of most recent

scientific knowledge it is doubtful if the infective dangers of street expectoration are so great as we have previously believed.

The average greater degree of sanitary knowledge and practice prevailing to an extent among all classes at a modern health resort is also highly conducive to the physical improvement and gain showed by the immense majority of visitors to our mountain resorts.

The most careful attention to sputum indoors, thorough ventilation and open-air life so much in vogue at the modern health resort for tuberculosis renders them safer and should be continued.

The Use and Abuse of Mineral Waters.

By Benj. K. Hays, Resident Physician Buffalo Lithia Springs, Virginia.

"My doctor told me to come here and drink all the water that I could," is a statement frequently made to me by patients at the Buffalo Lithia Springs. No letter of introduction is sent, no written statement of diagnosis or history of the case is presented, and the patient confesses that he was not directed to obtain medical advice during his stay at the springs. Upon inquiry it will be found that he has not been instructed how or when to use the waters,—whether internally or externally, hot or cold, upon an empty or full stomach, how much or how frequently.

He has not been advised as to diet, rest, exercise or habits of life. His idea is to drink the waters—the more the better—that they will cure him, and that matters of hygiene or medical surveillance are of no import.

In "Hare's System of Therapeutics" the chapter on Mineral Water is headed, "A branch of Therapeutics Much Neglected by the Profession at Large." My observation has not only confirmed this statement, but has led me to believe that there is a prejudice against mineral water on the part of the medical profession in this country. Nor is the cause hard to find. The mineral springs are, as a rule, the property of private individuals. The waters are advertised directly to the public, and the claims of the proprietors, backed by abundant testimonials from patients, are oft-times not only extravagant but absurd.

In Europe, on the contrary, the mineral springs usually belong to the government; their properties are made the subject of extensive research by competent observers, and their therapeutic claims rest upon a scientific basis. Every patient attending a European spa is required to place himself under the care of a local physician, nor does a patient think of presenting himself without a letter from his physician at home.

As a consequence, the European spas are better known, and the results obtained more satisfactory than in America. Many American physicians of great learning confess that they have never given an hour's study to the subject of mineral water. In their textbooks they advise the use of the waters of Europe in seeming ignorance of the fact that the counterpart of every famous European spring may be found in American soil.

I am convinced that wealthy Americans spend thousands of dollars annually at foreign resorts, which sum might be spent to a better advantage, not only in this country, but frequently within a day's journey of the patient's home.

Nothing is further from my purpose than to press upon this body the claims of any special mineral water, but I do desire to call the attention of the profession to the general subject, in such a way that it may not be passed over as a matter of no importance; and I desire further to urge, that before sending patients abroad we investigate the claims of the mineral springs of our own respective states.

Pure or distilled water is of no practical interest to us here. It is difficult to obtain, unpleasant to the taste, and according to Burney Yeo (in his classical work on the Mineral Springs of Europe) is regarded by experimental physiologists, "a remarkable conclusion" says that writer, as poisonous.

There are certain minerals found in all good drinking water which are essential to health. Waters which have an extensive sale because of their purity contain from four to ten grains of mineral substance to the gallon. Drinking melted snow is believed to be one of the causes of goiter, and probably of other diseases. If this is true, it must be the result of a negative rather than a positive harm in the water, which the presence of certain mineral substances would overcome.

On the other hand the presence of objectionable substances in drinking water leads to frequent and numerous forms of disease.

When typhoid fever appears in the community we at once subject the water used by the patient to examination, but repeated attacks of renal colic, intestinal fermentation, and many other troubles are permitted to pass without investigation.

Cold Water.

Cold water taken into the stomach increases arterial tension, reduces the pulse rate and stimulates renal secretion.

The increased flow of urine from drinking small quantities of ice cold water is in excess of the quantity of water taken.

Just how this effect is produced physiologists have not made clear. The opposing

theories of Ludwig and Bowman cannot be here discussed, but the fact is of clinical importance. For, since warm water reduces arterial tension, quickens the heart's action and is eliminated chiefly by the skin, it is clear, that in cold, and in warm water, we have two very different therapeutic agents. The former is indicated in dropsical conditions when the heart's action is labored,—a condition in which large quantities of warm or temperate water undoubtedly do harm. On the other hand, when it is desirable—as in certain forms of Bright's disease to reduce arterial tension, or to eliminate uric acid products from the tissues, I am convinced that large quantities of temperate water are of service.

Formerly there was a conflict of opinion as to whether the increased flow of urine, resulting from the inhibition of large quantities of water, does or does not increase the elimination of solids by the kidneys.

The truth, as finally obtained by Meyer is of practical importance. Upon the wasting products of the body tissue in normal katabolism water exerts no influence; but when the tissues are surcharged with the products of disintegration, water acts as an eliminant. In other words, large quantities of water do not hasten normal metabolism, but do tend to eliminate the agents of auto-genetic intoxication.

Since water is known to possess therapeutic value, the question at once arises, can we not add such minerals as we desire to pure water and thereby obtain the effect of the natural mineral waters? It would seem that we could, yet it has never been successfully done. The universal belief of students of the subject is that in the alembic of nature there are secrets which no chemist has been able to discover.

In natural mineral water the minutest quantity of carbonate of calcium causes marked diuresis: a few grains of sulphate of magnesium of sodium renders it laxative, and less than 1-100 grain of arsenic to the gallon has been known to produce the physiological effect of that drug.

Marion Sims in "The Story of My Life," says that at one time he suffered from a chronic diarrhoea which came near proving fatal, and that his life was saved by a visit to Cooper's Well.

Personally, I can say that during the winter months I suffer from pain in every joint that is exposed to the cold and wet, and that these pains promptly disappear when I take up my summer abode at the Buffalo Lithia Springs.

Let us make abundant allowance for the many adjuvants to health found at popular resorts—rest, change, good food, new faces, pleasant companions, beautiful scenery—all of great value, as is shown by a visit to the mountains, or to the sea shore. But neither mountains nor seashore relieves chronic skin eruptions nor dissolves renal calculi.

In the use of mineral waters their good effects are seen no less frequently when used in the patient's home—though to a less degree—than at the springs. We are therefore driven to the inevitable conclusion that a judiciously advised visit to a properly selected mineral resort combines the advantages of medicinal treatment with a restful pleasure trip, to which are added an unknown quantity, be it electricity, radium or psychic phenomenon—which is powerful in combat with disease.

Classification.

A satisfactory classification of mineral waters is impossible, since one class often shades into another, making it difficult in many instances to say to which class a given water belongs.

Many classifications have been proposed. It is sufficient for our purpose to divide the mineral springs into Hot and Cold, and subdivide these into Alkaline, Saline and Chalybeate.

The alkaline waters are the ones most frequently recommended in text books on Practice. Their chief ingredients are the salts of lime, combined, as a rule, with magnesium, potassium and other alkalies most valuable among which are the salts of lithium. These waters usually contain carbonic acid gas, which renders them light and pleasant to the taste.

The saline waters contain, as their chief ingredient, sodium chloride. Sodium and magnesium sulphate are frequently found, and sometimes iodine and bromine.

The chalybeate waters contain iron, usually in the form of a bicarbonate or sulphate. One grain to the gallon will manifest itself in the patient, and is dangerous where iron is contraindicated.

Arsenic, sulphur and the iodides are found in mineral waters, and frequently produce a more desirable effect than can be obtained by prescribing these drugs in any other form.

The Therapy of Mineral Waters is so varied that it can only be touched upon. The chronic dyspeptic, the neurasthenic, the anaemic and the rheumatic are, like the poor, with us always.

The pharmacopœia and your patience are alike exhausted, yet your patient continues to suffer. A postal card will bring you information about any spa in the country.

The alkaline waters are indicated in uric acid troubles, in rheumatism, dyspepsia, renal calculi and nephritis and cystitis. They are also of service in the acute fevers,

and in some way which I am not able to explain I have seen sugar entirely disappear from the urine under their use.

The saline waters are especially indicated in diseases of the alimentary tract, such as torpid liver and flatulence, and when they contain iodine—in syphilis.

The iron waters are tonic, and are serviceable in anaemia, chlorosis, malaria, and in sterility in women. Most persistant cases of eczema have been known to yield promptly to arsenical waters, and the chloride of calcium waters are also said to be of service in skin affections.

Since mineral waters improve digestion, eliminate effete material and add to the general tone of the system, it is not unreasonable to claim that almost any condition may be helped by their judicious use. But they must be used advisedly. Patients suffering from cancer of the stomach, and other abdominal tumors are sometimes sent to mineral springs. It has seemed to me in watching these cases, that while the patient's general health improves that the growth of the neoplasm is also quickened.

In the latter stages of parenchymetous nephritis, when the diseased heart is laboring to do its work, I have seen patients hastened to the grave by crowding their stomachs with water.

In disorders of digestion nothing is more irrational than to add large quantities of cold water to an already overcrowded stomach, and in atheroma the increased arterial tension caused by cold water will surely hasten the fatal appoplectic stroke.

The physician who does not employ mineral water in his practice neglects a most valuable aid in the cure of many diseases; while the patient who believes that the one essential to cure is to drink large quantities of mineral water is sure to do himself incalculable harm.

Malaria and the Mosquito.

By H. C. Buck, Friars Point, Miss.

I am not disposed to question the mosquito theory as regards yellow fever, I have had no experience with this disease and am willing to accept the theory in full, but long years of experience and observation in an intensely malarial section lead me to seriously doubt the mosquito being the *only* means by which the poison can reach the human system. *All* authorities (that I have read) up to 1895 claim the poison, or germ, enters the system through the air passages, being in the air, and through the intestinal tract, being in the water found in surface wells. During my early stay in this section, the water used for drinking and cooking was obtained from springs, shallow wells, or from tanks (usually built of wood) filled with rain water, also the timber was being rapidly cut and the land cleared for agricultural purposes. Of necessity, there was an abundance of decaying vegetable matter, and malaria in all its forms was very prevalent all over the country. After a time artesian wells were introduced and the decaying vegetable matter gotten rid of to a great extent. Where the water from the artesian wells was used and where the section was comparatively free from dead or dying timber malarial affections gradually diminished, although the mosquito seemed as much in evidence as ever.

If those who advocate the infallibility of this theory will send me two or more healthy men, who have never been exposed to malaria, and let me locate them in one of many places in this, Delta country, I will agree to protect them absolutely from the mosquito, but I will subject them to all other climatic influences and surroundings, they must drink "pump water," expose themselves to the night air, the morning dews and the mid-day sun. If after thirty days of this test during August or September they do not develop a good old spell of malarial fever within the next thirty days I will swallow the theory "feathers and all." This, it seems to me, is the only fair and practical way to test the matter. I do not deny that the mosquito can and does carry the poison, but I am firmly of the opinion that there are other ways by which we can and do get it in the system. We have in this section a disease, that for want of a better name, we call Typho-Malarial fever, where we find prominent symptoms of both typhoid and malaria. Are we to understand that in order to have this disease one must get his typhoid germs out of the water and then hunt up Mrs. Anopheles to get his malaria?

In a very humorous article by Dr. A. C. Gore, Hohenlinden, Miss., he asserts and claims the honor of the discovery, "The bite of the bed bug will cause night mare, *but before the bed bug can give a man night mare, it must bite an old maid who has night mare.*" The doctor failed to note that in order to demonstrate his theory he must place the *man* and *old maid* in rather questionable proximity.

But really is there not a great deal of "hot air" in this mosquito theory? I fear there are very many "one horse" country doctors (myself among the number) who through ignorance, or pure cussedness, will adhere to the opinion that there is. Is the experience and observations of over a quarter of a century, backed by that of all writers on the subject, up to the close of the last century, worth nothing? Are we to be

lieve, as asserted by a recent writer, that "The antiquated text-book of medicine is a positive and wide-spread danger to society. It perpetuates and makes active the baleful influence of our medical forbears." Are we to believe "our medical forbears" were a set of nin-com-poops? Away with such nonsense. Let us try to separate the wheat from the chaff and store away the wheat.

Medicine in Buncombe County Down to 1885; Historical and Biographical Sketches.*

By Gaillard S. Tennent, M. D., Asheville, N. C.

The act establishing the county of Buncombe was ratified on the 14th of January, 1792, the new county embracing all that part of North Carolina lying west of the Blue Ridge, or watershed. From this large area other counties were cut off from time to time, the formation of Madison in 1850 reducing it to its present limits, to which we shall confine ourselves in the following sketches.

Ten years before the formal establishment of county government the first settlers had crossed the Ridge and effected permanent settlements on the Swannanoa, and for at least twenty-five years after the same event we may regard the county as but the seat of a primitive backwoods settlement.

The only reliable and connected records of this period available are the court records beginning in 1798 and the entries in Bishop Asbury's journal made on the occasions of his yearly visitations in the mountains, quoted by Mr. F. A. Sondley in his article published at the time of the celebration of Buncombe's centennial, and from them we are unable to glean more than a trace of anything connected with the general health conditions or of anyone engaged in the practice of medicine.

These settlements were about thirty-five years behind the Piedmont districts of South Carolina, of which an excellent description is found in the appendix to Ramsey's History of that State from the pen of Dr. Davis, presumably a citizen of the Piedmont, and written about the year 1808. He says: "While the upper country has been growing richer it has declined in health. When the interior of this country was first settled by white men, and for many years after, disease was rarely known. This state of things, however, has been gradually changing from that period to the present. Ever since the last years of the eighteenth century diseases have multiplied in a ratio much exceeding the increase of population. Many types and grades incident to populous and older countries have been introduced with their usual force and malignancy." The increase he attributes to physical changes in the face of the country, the gradual revolution in manners and modes of living and the increasing difficulties attendant upon making a living. He omits the factor which in the light of modern science would stand at the head of the list, viz.; increased facilities for travel, intercourse and exchange of commodities, germs, etc.

We may with reason assume that the above conditions existed in the settlement in the formative period in which it was a more or less isolated colony. After this began what may be termed a transitionary period of fifteen or twenty years, dating from the opening of a passable road into Tennesse, which soon became such a highway of travel that a Turnpike Company was organized in 1826 to improve and operate it. The consequent intercourse with more populous communities, both east and west, must have quickly imported the diseases of civilization along with its other attendants, while the stream of emigrants passing through must have left seeds of infection in its wake.

We can only speculate on the probable date of the appearance of one or two important diseases. Dr. Davis goes on to say, speaking of fevers: "Agues and fevers are more rare than formerly. They seem to have been merged in the more virulent forms of bilious fever." This is clearly typhoid fever, it not being generally recognized as a specific disease at this time, and, though it is possible that no accidental case came into the settlement earlier, it must have gained a more or less permanent foothold soon after the tide of travel turned across the mountains.

"Milk Sick," that mysterious mountain disease, which was quite common from the time of the earliest settlements, occurred in the Hominy valley as late as the middle of the nineteenth century, and even in the eighties there were points of infection fenced off in pastures in the Pisgah Mountains. The symptoms, those of severe gastro-enteritis with some variations, were said to follow the ingestion of milk or butter from an infected cow. The origin was variously ascribed to some unknown plant or fungus growth, or to some mineral poison occurring in certain spots.

Scarlet fever and diphtheria were not unknown in the low country during the eighteenth century, therefore it may be presumed that they occurred to some extent before the first authenticated epidemics reported by Dr. J. A. Reagan in the early sixties. Dr. Reagan also reports a serious

*Read before the Buncombe county Medical Society Nov. 20th, 1905.

epidemic of pneumonia in 1864.

It is a well known fact that tuberculosis was a rare disease among the inhabitants up to the end of the time covered by these sketches.

In the earliest times the practice of obstetrics and the care of such cases of illness as affected the hardy race of hunters, whose agricultural operations were secondary, and shared in largely by the women, were generally in the hands of the "Granny" of the neighborhood. She was usually a woman of mature years or even aged, well versed in the arts of primitive medical botany, the collecting and curing of roots and herbs, as well as the preparation of "teas." This relic of frontier life has clung to the population with all the tenacity of superstition, often fostered by necessity, and it is only in recent years that it is receeding into the coves and corners of the county. In the more intelligent households this practice was improved by the study of some work on family medicine. Accidents, injuries, etc., were attended to by some man qualified by long experience.

This state of affairs will not cause wonder when we realize that, according to Ramsey, there were only twelve natives in the whole State of South Carolina who had obtained degrees in medicine up to 1778, and these from foreign schools, the remainder of the practice being in the hands of Europeans, and that even in 1808 most of the plantation practice was domestic in the rich and populous country around Charleston where disease was rampant.

During this long period the only man known to have engaged in the art of healing was Geo. Swain, father of the Governor of that name. In his book of sketches, Gov. (of S. C.) Ben Perry mentions that while attending school at the Newton Academy in Asheville he boarded in the home of Geo. Swain, who to the office of post master and his trade of hat making added the calling of doctor. Swain came here from Oglethorpe county, Georgia, in 1796 and bought a lot on the west side of Main street where it is presumed he lived at first.

In the transitionary period above mentioned we cease to grope in the mists of comparison and surmise wherein our paper was near losing its claim to the historical, and come upon one fact. Back of this period, in 1793, there was born in the Reems Creek valley, Robert B. Vance, son of David Vance, and the youngest of several children. He was the first native of Buncombe county to adopt the practice of medicine, and, until many years had passed, the last one, according to the limited data at our command.

We are indebted to Mr. F. A. Sondley for information concerning Dr. Vance's life obtained from papers in his possession. This young man, born of a family whose name is now historic, began his short career of activity with a serious handicap, his left leg being shorter than its fellow as a result of white swelling. Despite this infirmity, however, he gained a great notoriety in his nine years of public life.

He studied medicine at the medical school of Dr. Charles Harris in Cabarrus county, and in 1818 opened his office in Asheville where he practiced till 1821. Disliking the work, he gave it up for politics, being able to do this on account of a $5 000 prize won in a lottery and property left him by his father. He succeeded Felix Walker, (the man who spoke for Buncombe) as representative for the Buncombe District in the lower house of the 18th Congress (1823-1825), but was defeated in 1825 when he ran for the same office by S. P. Carson. In 1827 Carson again defeated him after a canvass in which Vance forced Carson to challenge him.

The duel was fought at Saluda Gap on the South Carolina line in the fall of 1827 when Vance was mortally wounded, only living a few days. There were present at this duel among others, Vance's physician, Dr. Geo. D. Phillips, and the celebrated David Crockett, one of Carson's party.

After Dr. Vance's retirement from practice in 1821 the next man of whom we have any knowledge was Dr. George D. Phillips, who in the early twenties came to Asheville, like many of his successors, on account of ill health.

Like Dr. Vance he was fond of public affairs, but, unlike him, his span of public service extended over a half century.

He was born in Amherst county, Virginia, in the last decade of the eighteenth century, educated at William and Mary, and graduated in medicine at Jefferson, in Philadelphia. Before coming to North Carolina he practiced in Newberry and Union, South Carolina, where he served one term in the State Legisture. He engaged in active practice in Asheville, and here he was married in 1823 to Elizabeth, daughter of James W. Patton. In 1830 he bought property on Cane Creek, the place now known as Struan, The Lyman home, where he lived and practiced for six or seven years, moving from there to Habersham county, Georgia. While a resident of Buncombe he was one of the promoters of the French Broad Turnpike, above referred to.

After moving to Georgia he was still more actively engaged in public affairs, being sent to the legislature for ten years,

where he was materially interested in the organization of the State Medical Board, and the building of the Georgia Railroad and the State Sanitarium. For many years he was a member of this board, acting as examiner for North East Georgia. At the time of Sherman's raid he was superintendent of the Railroad, and was credited with saving most of the rolling stock.

These varied activities exhibit a strenuosity of life and the possession of a power of initiative seldom found in the profession. To the culture and polish of Old Virginia he added much of the rough-hewn strength of the early settler, a combination long since lost. He died at the age of eighty.

A contemporary and probably a pupil of Dr. Phillips next claims our attention. J. F. E. Hardy was born in Newberry District, South Carolina, in 1802, and, though coming from one of the first families of upper Carolina, he began life in a very obscure position from which he arose to prominence by virtue of his own efforts and merit. At an early age he was left an orphan in the care of an uncle who apprenticed him to a tailor. As a youth he had higher aspirations, but it is not known whether his renunciation of the work was earlier than or whether it was on account of the same breakdown in health that brought him to the mountains.

At any rate, he came to Asheville about 1821 "with only one lung," which organ, we may state for the benefit of the specialists, served him in a satisfactory manner for the following sixty-one years. In 1824 he married Jane Patton, sister of Dr. Phillips' wife, and shortly thereafter went to Charleston to attend lectures, graduating at one of the two medical colleges then in existence in that city.

For fifteen or twenty years Dr. Hardy lived in the house on the corner of South Main and Eagle Streets, at that time one of the imposing residences of the town, but for many years degenerating, till, under the name "Greasy Corner," its reputation sank so low as to necessitate its removal this year (1905). It is surprising to note how many of these old landmarks were either built or occupied by physicians, at one time or other. Dr. Hardy's first wife did not live long, and in 1840 he married Miss Erwin, of Morganton, soon after which he moved to Swannanoa Hill which now overlooks Biltmore Bridge.

Here he lived till 1860 when he sold this fine estate and bought Belleview, on South Main Street, built by his son-in-law, Gilbert Tennent, in the early fifties as a summer home, and now owned by Mrs. Buchannon. Soon after the Civil War he withdrew from practice, and built the brick house on the west side of the Hendersonville road beyond Biltmore, which like his first home has recently been torn down. Here he ended his days at the ripe age of eighty.

Unlike his predecessors he had little to do with public service, though his life was an active one, his sphere of activity being limited to his practice and the cares of his estate which at length became large for Buncombe of that day.

For many years he was the acknowledged leader of the profession in Western North Carolina, and to this day his professional and social position has never been equalled.

In general practice he was the most universally beloved and popular man the profession has known in this county, his clientelle embracing, besides his own county, the Flat Rock settlement, and at times even invading lower South Carolina.

In surgery he was a fearless and skillful operator, these qualities being severely taxed during the early years when he was often isolated from professional aid.

Socially he was possessed of engaging and polished manners, and the broad hospitality dispensed at Swannanoa Hill and his other homes was long remembered by visitors to the mountains.

Of the children of each marriage the first son was killed at the age of twenty, James in one of the battles of the Mexican War, and William in the first battle of Manassas in the Civil War.

One son, J. Geddings, named after Dr. Eli Geddings, a life long friend, took up his father's calling.

Another contemporary of Phillips and Hardy, Dr. John Dickson, was born in Charleston in 1795, graduated from Yale in 1814, and studied medicine and divinity, being pastor of the Asheville Presbyterian Church in 1843-45. He came here for his health some time before 1836, in which year he bought property now located by the junction of the Biltmore and St. Dunstans roads where he built the house long known as the Middleton place, recently removed to make room for St. Dunstans Road. Here he opened a school which he continued after moving several years later into the house at the corner of Church Street, where the Dhrumor building now stands.

Elizabeth Blackwell, a native of England, came here from Cincinnati as an assistant in this school, read medicine under him, and later through the influence of his brother, Dr. S. H. Dickson, obtained the first Medical diploma granted a woman in this country.

Dr. Dickson died in 1847, and this year (1905) was placed a tablet to his memory in the wall of the First Presbyterian Church.

From the thirties two more names come

down to us, Dr. Milton, who practiced in the Hominy Valley, moving from there to Georgia about 1832, and Dr. Osborne from Haywood county, who practiced in Asheville for a short time.

About this time two distinguished names were connected with Asheville; Dr. S. H. Dickson and Dr. Eli Geddings, both of Charleston, spent many summers here. Dr. S. H. Dickson, whose name stands in the front rank of practitioners of his day, was a brother of John Dickson. He built Swannanoa Hill and later, Forest Hill, at which place he entertained large parties of guests in the lavish style of the ante-bellum days.

Dr. Eli Geddings was in the first class graduating from the Medical College of South Carolina and filled at different times several chairs in this and the succeeding institution. In "Green's Pelvic Organs" we read that he was the first operator to pare the edges in the operation for cervical lacerations.

Dr. Thomas C. Lester, another South Carolinian, came here a young man about 1841, and opened an office in South Main Street opposite the head of Eagle Street. Some time after coming here he was married to Miss Happoldt, of Morganton, and before his death, which occurred in 1854, he had succeeded in building up an extensive practice.

Dr. Barnard Weaver, son of James Weaver of Reems Creek, was practicing in northern Buncombe in the forties. About 1858 he went to Missouri where a few years later he met a tragic death. He hald sold some stock and was murdered for the money.

The next accession to the ranks, Dr. Morgan Lines Neilson, deserves a greater tribute than these few weak lines. He was a plain and unassuming man of the highest ideals, always exhibiting that large sympathy so endearing in the family physician, of which he was a perfect type. His services did not always end with advice and prescription, but often embraced some of the arduous duties of the nurse in a critical period, a custom common among physicians of his time. Dr. Neilson did not give up this practice as it fell into disuse in later years, and a half century of this sort of work coupled with his large marriage connection so closely identified him with this country that it was generally lost sight of that he was not a native Buncombite.

He was born in East Tennessee in 1822, educated at Tusculum College, and came to Asheville in 1839. He attended lectures at the old Transylvania University, and in 1844 married Laura Vance, sister to the Senator, and started practice. His home, with the exception of two years spent in the California gold fields, was the old Fulton place, 254 North Main Street, until the beginning of the war.

At the outbreak of the Civil War he entered the 14th N. C. Infantry as surgeon, serving in the same regiment to the end. Following this he spent six years in South Carolina. Returning to Asheville, he lived at 71 Woodfin Street till his death in 1894.

He was associated in practice with Dr. W. L. Hilliard in the early days and later with Dr. Cain.

Dr. David J. Gibson, another associate of Dr. Neilson, came here in the forties from Tennessee. He married Miss Harriet Johnston, daughter of William Johnston, and after a few years moved to Jonesboro, Tennessee.

Dr. Charles N. Candler came to Asheville some time before 1850 from the present Madison county. His office was on the north-west corner of the Square, where he practiced several years before being infected with the western fever, and succumbing to this disease seemingly common among the young physicians of his time. He returned to Leicester after the war, where he practiced upwards of fifteen years.

During the decade beginning with 1850 the ranks of the profession were recruited by an influx of young men of ability, who, for the most part, came to stay. Four of them are with us yet, three being still engaged in practice.

Dr. William Lewis Hilliard was born in 1823 in Hall county, Georgia, of North Carolina parentage, grew to manhood in Spartanburg, where he began the study of medicine. About 1845 we find him in Asheville, studying with Dr. Lester. After attending lectures in New York, he entered the Philadelphia Medical College and graduated in 1850, in which year he entered into partnership with Dr. Lester.

Some time previous to this a political disagreement with an editor named John Hyman led to a duel, which was fought at Saluda Gap. Unlike the former occasion this was the cause of no serious damage. These two instances are the only practical references to the code chronicled, in which medical men of our county were principals.

In 1854 Dr. Hilliard was married to Margaret Love, daughter of James R. Love, of Haywood, and moved into the house so long a landmark on the Hilliard lot, replaced in 1886 by the present building. His office was at first a small, two roomed structure at the corner of Willow and South Main Streets.

During more than forty years Dr. Hilliard devoted himself with untiring self-sacrifice to the relief of the sick and suffering without respect of rank or circumstance. He

was a perfect type of that masterpiece evolved by nineteenth century conditions and culture, the family physician, and he exemplified the strength of the bonds between that type and its votaries in holding the same clientelle through ante-bellum prosperity, reconstructional depression and the instability of the growing city.

Dr. Hilliard's war record was a distinguished one. His first commission was from the Governor as Surgeon in the 1st N. C. Cavalry, in May, 1861. Six months later this was confirmed by President Davis, the regiment being then known as the 9th N. C. After a few months he was transferred to hospital duty at Knoxville, and in September, 1862, was appointed by the Surgeon General, Chief Surgeon of Division.

In August, 1863, he was appointed president of an examining board to meet at Knoxville to examine applicants for medical offices.

When Bragg's army fell back from Tennessee the order came for him to open up hospitals at Dalton, Ga., in anticipation of a great battle. This was Chickamauga. Here he became critically ill, and a long convalescence caused his return to Asheville, where he was in charge of the hospitals at this post till the end of the war.

In 1890 death suddenly ended his career. Three sons, however, have lengthened the medical services of this family.

J. S. T. Baird, a grandson of Bedent Baird, one of the Pioneers, was born on Beaverdam in 1831, attended lectures in Charleston and graduated at Jefferson in 1851. After a few years' practice here, he went to Tennessee. Moving back to Buncombe in a short time, he settled on Beaverdam where he now lives, having given up practice since 1887. His son, the late Harry L. Baird, was once president of our society.

During the war Dr. Baird served on the conscription examining board with Dr. D. T. Millard who came under orders from eastern Carolina for the purpose.

Dr. Millard, it may be here stated, though long a resident of Asheville never engaged in active practice here.

In the early years of this decade Drs. Geddings Hardy, Stevens and Fletcher were fellow students under Dr. Hilliard and the elder Hardy.

J. Geddings Hardy was born in Asheville in 1829. Here he spent his childhood and youth, and following in the footsteps of his father went to Charleston, where he graduated in medicine in 1851. After practicing in Asheville a short time, he moved to the Georgia Seaboard where he married and lived until commissioned Assistant Surgeon in the Bethel N. C. regiment, in which he served till the close of the war.

Returning to Asheville, he again took up practice, and continued in active service till shortly before his death in 1885. His home was in Church Street, just below the rectory of Trinity Church.

He fell heir to a large share of his father's practice, and being a man of ability with the same faculty for making friends, he was only prevented from rivalling his father's success and brilliancy by the depression, mental as well as material, of this sad period.

Beginning with his return home he began a series of metereological observations, supposed to be the ones on which were based the table referred to below.

James Mitchell Stevens was born on Swannanoa in 1827. His childhood and youth were spent at the old Stevens homestead on the Hendersonville road, another old landmark recently gone. He studied medicine in Asheville and attended lectures in Charleston, taking up the practice in 1853 in Asheville, where he remained until 1859, when he removed to Leicester. While in Asheville he was married to Miss Catherine Cecilia Corpening.

Upon the sounding of the call to arms he was commissioned Captain, in which capacity he served a short time until transferred to the surgical service in the 60th N. C.

In 1865 he was engaged in practice with Dr. Boyd in Asheville, soon, however, returning to Leicester, his present home, after a short sojourn in the west.

One familiar with the physical difficulties and the conditions of life met with in practicing in the outlying portions of our county, the real mountains, needs hear no higher tribute than this to the moral, mental and physical strength back of this career: Dr. Stevens still continues to ride to every call as erect and as resourceful as at any time these fifty-odd years.

After Dr. Stevens the next native of the county to take up medicine bid fair to rival any of this group of young men in the extent of his wide and useful practice when he was cut off in his prime. John Daniel Reynolds was born at the old Reynolds home on the Sulphur Springs road in 1832. He graduated in medicine at Nashville in 1854, in which year he was married to Theresa E. Sheppard, of Yancey, and settled in Asheville on the Reynolds lot, corner of North Main and Woodfin Street, where his small office building still stands.

He served throughout the war in the 29th N. C. in a surgical capacity. After only a few years more of practice he died in 1874, too soon to see more than the dawn of his county's prosperity. His only surviving

son is Dr. Carl V. Reynolds.

Here we must digress a mile or so across the Henderson border to pay our meed to the memory of another long life of country practice covering a large area in southern Buncombe.

George W. Fletcher, grandson of another pioneer, was born at the old Fletcher place across Cane Creek in 1829. His active life of practice began in 1855 in which year he graduated in Charleston. He built the present Fletcher home, and married Elizabeth Clayton, who survives him. Here he practiced until a short time before his death in 1901, endearing himself to a large circle of friends, comprising, besides the native population, a number of low country planters who had summer homes in the neighborhood.

He was a man of strong personality and opinion, of rugged strength, yet withal, of broad sympathy. One son, Dr. M. H. Fletcher, adopted his father's calling.

Dr. James Americus Reagan is the only survivor of the first effort at organized medicine in our county. He was born in Bradley county, Tennessee, in 1824, and moved to Weaverville, his present home, in 1851, being then a circuit rider in the Methodist Church. After graduating in medicine at Shelby in 1859 he added the practice of physic to this service of the church. For many years his regular work extended over a wider scope of territory than that of any one in the county, taking in parts of Madison and Yancey.

In 1867-68 Dr. Reagan was vice-president of the first Buncombe County Medical Society. Later, when it was re-organized for a time, he was vice president again for one year and president for the two remaining years of its existence. In 1884 he was appointed on the State Board of Medical Examiners.

His marriage to Miss Mary Weaver made for him a large connection in the county, and his many years of devotion to the spiritual as well as bodily welfare of a large following have won a place for him that will never again be filled. Dr. Reagan has always been the deepest student and the most scholarly of our country physicians, his facile pen still at times enriching the medical annals of the State.

Another student of Dr. Hilliard's, George H. Thrash, was born in the Turkey Creek section in 1834. He attended lectures at the National Medical College in Washington and in 1859 entered upon his long career of country practice in the Hominy Valley, where he still lives and practices. He was a surgeon in the Militia during the war.

Before leaving the fifties mention should be made of Dr. J. L. Crumley, one of the first "birds of passage" in the profession, who came here about 1852, and moved on in two or three years. Dr. Foreman, another, came into the Hominy Valley from Transylvania, and during the war moved on to Haywood.

In 1860 Daniel F. Summey, a native of Lincoln County, who had studied under the elder Hardy, graduated in medicine at the University of the City of New York and began work here.

He served through the war in the Quartermaster Department under Col. Stephen D. Lee, after which he practiced in Asheville until 1885. He then moved to Leicester where he now lives though not in active practice.

Another graduate of this period was Dr. Joseph McDowell, brother of the late Maj. W. W. McDowell of this city. For some time before the war he was in charge of the old Warm Springs Hotel. His war record was in the line where he rose to the rank of Colonel.

During the four years of war Dr. J. F. E. Hardy was the only physician who practiced uninterruptedly in Asheville, all of the others being in some way or at some time connected with the army. A complete war record of the county from a medical standpoint will not be attempted. In most cases the command in which engaged is all the information available as to these medical officers whose services are here chronicled. The only remaining names connected with the military service are those of Drs. R. W. Cooper and David M. Gudger.

Dr. Cooper was on the surgical staff of the 60th N. C., and practiced for many years in the Fairview section.

David M. Gudger was a private and corporal in "Zeb Vance's Company" in the 14th N. C. until wounded in "The Seven Day's Fight," furloughed and entered the Q. M. Department of the Western Army. His medical services date from 1868 when he graduated at the University of Philadelphia after studying with Dr. Holt. Dr. Gudger was born at the old Gudger place in the Lower Hominy Valley which continues to be his home, though he has given up general practice.

Dr. E. P. Holt, above mentioned, came to Asheville from Alamance county in 1865, and practiced a year or two with Dr. Summey. Dr. Boyd, of Mecklenburg, also practiced here in 1865.

About this time Dr. Daniel J. Cain, of Charleston, made Asheville his home. He was a man of the highest professional attainments, scholarly, possessed of a most pleasing personality and the courtly manners of the old school.

He was born in St. John's, Berkeley,

South Carolina, in 1815, graduated at South Carolina College, and in medicine at Charleston, after which he spent two or three years studying in Paris. During his practice in Charleston he served on the staff of the Roper Hospital for eight years, and of the Marine Hospital for fifteen years. Soon after coming here he opened a sanitorium at Swannanoa Hill which he conducted for two years, treating among others some consumptives. His home for many years was on South Main Street just below Hilliard Lane, and it was here that he died in 1888.

In 1886 Dr. Cain received a fee of $6,000 for a visit to Europe, the largest single fee, so far as known, ever received by a physician in this county up to that time.

In 1855 Dr. Charles Tennent, father of the writer, built Edgehill, in more recent years the home of Maj. H. C. Hunt until destroyed by fire a few years ago. This place he used as a summer home occasionally till 1868, in which year he moved to Asheville. He was born in Charleston in 1812, graduated at Amherst in 1834, and in medicine at Charleston in 1836. In 1870 he moved into the Lower Hominy Valley where he practiced in a local way till his death in 1881.

The first homeopath to make his home here was Dr. Charles Cliff. He came from Indianapolis in 1869, in which year he graduated at Hanneman, in Chicago, and settled at Swannanoa where he now lives. Of Dr. Gatchell, another homeopath who came about this time and of Dr. Gleitsmann we shall have occasion to speak further on.

Dr. I. A. Harris, who had attended lectures at Philadelphia, and adjourned with other Southerners to Richmond on account of the war, moved into northern Buncombe about this time. He is still engaged in practice, being at present on the Pension Board.

Dr. Gabriel F. O'Brian, of Cincinnati, also a homeopath, came to Asheville in search of health in 1871. He only lived a few years after coming here, during which time he engaged in practice.

In 1874 Dr. H. B. Weaver settled in Weaverville after two years' practice in Mitchell county. He was born in Weaverville in 1851, studied under Dr. Reagan, and graduated in medicine from Washington University, Baltimore, in 1872. He is the only western man ever honored with the presidency of our State Medical Society. His practice in Asheville dates from 1886.

A commentary on the practice of these times is contained in the following advertisement from an Asheville paper of 1871: "Dr. —— will attend all medical calls promptly. Prompt pay required in cash or produce." We do more scientific and hair splitting advertising nowadays.

Beginning with Dr. Weaver and up to 1884 most of those whose names appear in the annals of medicine are still with us, one exception being Dr. Percy Norcop, who was a sojourner here for a year or two about 1881. We will therefore obey the spirit of the old Greek maxim, "Call no man happy till he is dead," and only record the names and advent of the group of men collecting here in this period. The first of this number, Dr. R. L. Wilson, is still practicing in the Swannanoa section, where he was born and reared. Dr. William D. Hilliard graduated at Jefferson and took up work with his father in 1878. Dr. W. C. Brownson, of Connecticut, came in 1878; Dr. John Hey Williams, a native of Kentucky, in 1879; Dr. William J. Clontz, of Alexander, engaged in practice about 1880; Dr. James A. Burroughs, a Virginian, came in 1882; and Dr. A. M. Ballard, of Massachusetts, in 1884.

In this year, 1884, Dr. John Anderson Watson began his useful career in Asheville. He was born in York county, South Carolina, in 1849, graduated at South Carolina University and took up the study of medicine at the University of Maryland, where he graduated in 1872. After some years spent in practice at Chester, S. C., he came to Asheville and soon made a name for himself in gynecology, being an unerring diagnostician and a skillful operator. He was president of our society in 189–, which by his death in 1902 lost one of its most loved and valued members.

In 1884 came also Dr. Wardlaw McGill, a native of Maryland, who, after graduating in Baltimore some years before, had been engaged in Eye, Ear and Throat work in his native town, Frederick. This work he took up here, and despite the feeble state of his health, his ability and his pleasing disposition won for him a good practice and many friends during his short stay. The climate had cured several of his immediate predecessors, but it was not infallible, and death claimed him in 1888.

Those whom curiosity or interest may incline to sift the wheat from the chaff of the threshing begun by the act of 1885 are respectfully referred to the records of the Court Clerk.

For what has come down to us concerning the first and second Buncombe County Medical Societies, the present one being the third, we are indebted to the memory of Dr. J. A. Reagan, wherein is chronicled the only remaining record of these two early efforts. In 1867 the first society was formed, meeting once a month, with Dr. J. F. E. Hardy, President, J. A. Reagan, Vice President, and J. G. Hardy, Secre-

tary. This organization lasted two years with the same officers and a small membership. A year or two later it was reorganized with Dr. D. J. Cain as President, and Dr. J. A. Reagan Vice President. These officers were elected the next year and during the third and fourth years Dr. Reagan was President.

No further attempt was made at organization till 1885 when the present society had its birth. The original paper written on Jan. 12th, 1885, calling for a meeting on Jan. 26th, for the purpose of organizing the society, is now in the possession of Dr. J. A. Burroughs. It bears the following signatures: J. A. Burroughs, Wardlaw McGill, J. G. Hardy, D. J. Cain, M. L. Neilson, John Watson, W. W. Clark, W. D. Hilliard, John Hey Williams, W. C. Brownson and J. M. Stevens.

The importance of the county as a health resort is so great that a brief outline of this feature can only be attempted in this connection. If we are allowed the privilege of stepping a few miles beyond the present compass of the county, we will find that the region was known as a health resort some years before its settlement by the whites. To quote from Mr. Sondley's article: "The Warm Spring on the French Broad had been discovered in 1778 by Henry Reynolds and Thomas Morgan, two men kept out in advance of the settlements" (in Tennessee) "to watch the movements of the Indians. They had followed some stolen horses to the point opposite, and waded the river. On the southern shore, in passing through a little branch they were surprised to find the water warm. 'The next year,' says Ramsey, 'the Warm Springs were resorted to by invalids.' "

The first consumptive to visit Asheville, so far as we know, was Dr. Hardy, who came in 1821. He was cured, at least he lived here in good health for 61 years.

The first movement towards making a regular summer resort of Asheville for some reason failed. About 1827 Judge King, of Charleston, and Charles Baring, of the well known firm of Baring Brothers, then living in Charleston, came to Asheville to plant a little colony of summer refugees, driven annually by the heat and fevers from the south. Meeting with opposition, they bought the land now comprising the Flat Rock settlement.

The town, however, continued to be visited by invalids, many of whom were consumptives, off and on till 1870 when the publication of a pamphlet drew wider attention to it. This pamphlet, which was distributed at twenty cents per copy, bore the following title: (1) "Western North Carolina, its Agricultural resources, Mineral wealth, Climate, Salubriety and Scenery. By H. P. Gatchell, M. D., etc. Published by E. J. Aston, Esq., Asheville, Buncombe County, North Carolina." The author treats of the climatic advantages with a degree of moderation and accuracy that could have been copied to advantage by many succeeding writers. He states that in 1870 there were many people living in Asheville at an advanced age who had "come there as invalids early in life in the hope of being able to prolong a little their stay on earth." In this connection he quotes enthusiastic words from the pen of Dr. S. H. Dickson. Here appears for the first time the table comparing Asheville's climate with that of Geneva, Turin, Milan and Vienne, which has been used in many pamphlets, most of which failed to state that it was based on only four years of observations at Asheville, and most of them confuse "Vienne," the French town, with Vienna.

The writer, who was a professor in Hanneman College, Chicago, for some years conducted at Forest Hill the first sanitorium for consumptives ever attempted here.

The following pamphlets were circulated after the above:

(2) "Life in North Carolina," a reprint from the London Daily News, Aug. 8th, 1874.

(3) "Western North Carolina," by Beale and Martin, Asheville, 1875.

(4) "Western North Carolina as a Health Resort," by Dr. J. W. Gleitsmann, reprinted from Philadelphia Med. and Surg. Reporter, Feb., 1876.

(5) "Biennial Report of the Mountain Sanitarium for Pulmonary Diseases, 1877."

(6) "The American Mountain Sanitarium at Asheville," by Stanford E. Chaille, New Orleans Med. and Surg. Journal, April, 1878.

(7) "The Land of the Sky, Nature's Trundle Bed of Recuperation," by "Guy Cyril," (Hinton R. Helper), about 1880.

Several of these to the number of 64,000 were circulated by Dr. J. W. Gleitsmann, who was the first recognized authority to write at length on this subject.

Dr. J. W. Gleitsmann was a German by birth, a graduate of the University of Wurzburg and a pioneer in his special line of work. He came here from Baltimore in 1875 after hunting through the Virginia mountains for a suitable location. On June 1st, 1875, he opened the Mountain Sanitarium for Pulmonary Diseases at the old Carolina House which stood opposite to the Sluder place in North Main Street. Here he treated on an average twenty to twenty-five patients daily for five years, practically all of them coming from a distance; in the winter from the north and in the summer

from the south. Dr. Gleitsmann states that of all this number there were not more than a dozen lung patients from the town or immediate vicinity. During the sixth and last year of his stay he treated his patients at the Eagle Hotel.

He gives as his reason for throwing up the work and leaving Asheville, failure to obtain a suitable house wherein to carry on the work. It may be presumed that had the more enterprising citizens realized the immense results to accrue from Dr. Gleitsmann's advertising, the difficulty would have been overcome, and the Woodfin House which the doctor desired for a sanitarium would have been obtained for him. As it was Dr. Gleitsman probably did more than any other one man to bring this place into notoriety, for since his time the stream of travel has been continuous.

Child Study and the Treatment of Paralysis in Children.

Mumford (The London Medical Lancet) considers the steps by which a child learns to walk. These are (1) sitting up, (2) kicking, (3) rhythmically extending and flexing the legs, (4) balancing the head, (5) clinging to a support, (6) creeping on all fours. By these steps the opposing groups of muscles are developed. The writer advises that in all cases of spastic paralysis the muscles be massed twelve to fifteen times a day and that passive motion be made to imitate the natural ones. By this means the coarser movements can be acquired and then orthopedic surgery can be employed.

Cerium Oxalate in Vomiting.

Sweetnam in the Dublin Journal of Medical Science says that within the last few months he has been using cerium oxalate largely in cases of vomiting due directly to gastric disease, usually giving six-grain doses three times a day in adult patients, combined with ten-grain doses of carbonate of bismuth. In almost every case the result has been most satisfactory, and in several instances, when bismuth alone has failed to cause any marked improvement, a rapid change for the better has appeared when cerium oxalate has been added to the medicine. In gastric ulcer the pain is relieved and the vomiting ceases almost immediately; the same result occurs in chronic catarrhal gastritis, especially the form which is so common among badly nurished young women, whose work deprives them of their proper quantity of fresh air. In cancer of the stomach, although a permanent cure can not be expected, the symptoms are relieved and the patient's life is prolonged and made far more comfortable than by any other means; the pain is lessened, hematemesis cases, and the patients who have been unable to retain the smallest quantity of food taken by the mouth are soon able to retain several pints of milk per diem, and also small quantities of the prepared farniaceous foods. This of course, does not hold good incases in which the pyloric region is largely involved and in which the symptoms are mainly due to a mechanical obstruction of that opening.

Treatment of Diphtheria..

Rhodes, (British Medical Journal) believes that the very slightest exeuse should be sufficient for the diagnosis of diphtheria in a child. Even so slight a sign as dryness or a parched appearance of the external nares in a child who seems poorly nourished is sufficient to indicate, in most cases, that diphtheria toxin is being manufactured, probably in the pharynx. The author holds that diphtheria antitoxin never does any harm to a child, and that it will assist in curing illness due to some disturbance in the throat or nasopharynx, even if that illness is not actually due to diptheria. The time lost by delay in giving antitoxin in diptheria is often sufficient to render the chance of recovery very small. Though many experienced workers in the field of infectious diseases insist that very large doses are much more efficacious than small ones, sufficient stress is not laid on the fact that small doses, even though given late in the disease, will often just turn the scale in favor of the patient, or at least assist the patient to fight the disease and to hold it in check until the child can be taken to a hospital, where more antitoxin can be given. If every general practitioner would carry a syringe and one phial of antitoxin, much more antitoxin would be given before the child is removed to the hospital; the necessary delay in getting the antitoxin at present, and the difficulty, sometimes, in obtaining it, especially in country districts, being the only possible reason why this treatment is not adopted immediately in all cases.

Treatment of Common Cold.

Atkinson in the British Medical Journal says that the quickest relief in case of a common cold is obtained by giving 30 minims of sweet spirits of nitre and 30 dorps of aromatic spirits of ammonia in 1 once of water, repeating the dose in two and then every four hours. Three of four doses are generally sufficient to put a stop to the discharge. Should the discharge happen to be thick when first seen, then a snuff composed of 1 grain of cocaine, 2 grains of menthol, and 100 grains of boric acid quickly affects a rapid cure. When the cold has run down into the trachea, as shown by a tickling of the throat whenever a long breath is taken, then a mixture of liq. ammon. acet. 3ij, sp. ether. nit. mx in 1 oz. of water, every four hours, rapidly gives the required relief.

Charlotte Medical Journal

EDWARD C. REGISTER, M. D., Editor.

No. 36 South Tryon Street, - - - -

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THE MEETING OF THE STATE MEDICAL SOCIETY.

Much space is devoted in this issue of the Journal to furnish in full the complete program of the forthcoming session of the Medical Society of the State of North Carolina. The program needs no encomium at our hands. The painstaking efforts of the indefatigable Secretary are in ample evidence in its completeness. Never in the history of the Society has there been prepared a program so full and so thoroughly covering every section of the State.

It is distinctly representative of the profession of North Carolina in that it gives full opportunity for the presenting of the studies and work of the whole profession. The technical specialists of our cities, the erudite teachers of medicine in our colleges, the clever hospital surgeons, the broad-guaged general practitioner, the sturdy hard-worked rural physician—all, every class of Carolina physician is preparing to present his contribution in this program for the consideration of his fellow doctors and the improvement of all.

And this is distinctly and emphatically as it should be. Too often the major portion of the time of the meetings of medical societies is occupied with the consideration of papers which aside from a certain interest which we all have in anything concerning medical science, no matter what it be, are absolutely devoid of interest or practical value to the everyday worker in the field of medicine. Too frequently has the time of our own society been almost wholly occupied with the reading and discussion of papers presenting the details of some rare or peculiarly difficult operative procedure which was of no real utility to nineteen twentieths of its auditors. Again, it has been a not unknown fact that too much of the space on some of our annual programs has been occupied by gentlemen whose manifest interest in the North Carolina doctors was open to the criticism which was often freely made by the general practitioner from some of our smaller cities or from our urban districts who saw his paper, which had cost him considerable time and effort to prepare, side-tracked to permit the presenting of the ultra-technical product of the gentleman from the distant city whose visit was at times assumed to be primarily in the interests of certain commercial interests.

As an illustration of how much genuine regard for the Society gentlemen of this class really have we might refer to a meeting of the State Society some years back when a most elaborate paper was presented bearing upon certain technical procedures of comparatively little concern to the majority of members present. This paper was later presented at another State Society and published without ever a word in connection with it to indicate that it had been read before the Medical Society of North Carolina! Our exchequer had been depleted to the extent of more than thirty dollars in placing the paper in the volume of Transactions for that year, but there was no indication from the author that our hearing and our printing was appreciated?

The wide range of subjects covered by the program and the generous distribution of authors in every section of the State is but another evidence of the increased interest the organization of the doctors is developing in efforts to add to our common stock of professional knowledge. There is, however, a single criticism to be made, and that is there is not a proper proportion of the papers dealing with the important branch of Materia Medica. The change of the modern tendency to therapeutic nihilism in the practice of medicine can find an illustrative argument in the relatively few articles to be presented dealing with drugs in the treatment of human ills. Face to face with disease, at the bedside the utility of medicine is apparent to all of us, and in the minds of the laity an inherent necessity to the practice of our art. Hence, every medical society program the length of this and with the variety of topics treated of should exhibit a stronger presentation of the armamentaria medica.

The large number of papers on the program will render promptness and despatch in the conduct of business a necessity, hence it is to be expected that the sessions of the Society will begin on time, the authors of papers will be concise and terse, abstracting where practicable without injury to the continuity of thought presented, discussions short and to the point, dealing directly with the subject in hand rather than discoursive and irrevelant remarkings, and an earnest effort on the part of the officers of the society to secure for every gentleman on the program a portion of the time for the presentation of his paper or report.

The social features of the meeting will be of more than usual attractiveness, but the hours of their presenting will be so arranged as to permit the Society having a regular session each evening. So we may expect three busy, active days of work with a charming interspersing of social enjoyment which, with the completeness of the pro-

gram and the large attendance, will make the Charlotte meeting of 1906 a session long to be remembered by those present. Doctor, let nothing avoidable prevent your coming to the feast.

THE N. C. MEDICAL COLLEGE AT CHARLOTTE.

With the opening of the coming session in the Fall, the N. C. Medical College will remove both the Junior and Senior classes to Charlotte. For the past three years the Senior class has been taught at Charlotte on account of the abundance of clinical material to be had, but as the school has grown in years it has so grown in reputation that Dr. Munroe has found it absolutely necessary to enlarge the College in every way. Consequently with the help of a dozen of the Charlotte physicians the N. C. Medical College has been completely reorganized, and while Dr. J. P. Munroe will still be the guiding genius of the institution he will be greatly helped by the assistance of his Charlotte faculty.

The new organization has purchased a most desirable corner lot in the heart of the city and during the summer a $15,000 College building will be erected. The building will be modern in every respect and thoroughly equipped for the most modern teaching of medicine in the most practical way. The College will be three stories high and a basement. The first floor will have a large amphitheatre, library and reading room, offices and patients' waiting rooms. On the second floor will be the surgical, pathological, chemical and physiological laboratories, and on the third floor will be the dissecting room and laboratories for special research and codaver work.

The building will accommodate 200 students very comfortably and so no addition will be necessary for five or six years. The College is prepared now to take care of any future that may be before it. The clinical facilities of the city will be utilized fully, and with four general hospitals and two special ones the amount of material will be varied and plentiful. With the session of 1906-7 the N. C. Medical College will be able to satisfy every demand usually made upon a Medical College. The location is ideal, the faculty is composed of thoroughly competent men, the buildings better than most, terms reasonable, and living cheap and wholesome for the student.

With these and many other advantages the College will appeal to every physician in the State as being worthy of his good will and support. To patronize home industries simply because they are home industries is not always the best and safest, but when a home institution can offer all that can be had anywhere it becomes not only the best and safest but the only reasonable thing to do.

The College has a long record of good and faithful work behind it and the future looks most bright for an enlarged field of usefulness.

STERILITY IN THE FEMALE.

While the present public discussion of the general practice of "race suicide," especially among the more highly cultured portion of our population is exciting so much interest, it may be timely to present the reverse side of the picture. While it is unquestionably true that in very many families the desire for children is outweighed by the aversion to assume the obligations entailed upon their rearing and education, it is fully as evident that an intense, but for physical reasons, denied desire for posterity is a potent factor in the present decreased birth rate.

The number of women yearly applying to gynecologists for the relief of sterility is astonishing to one who is not familiar with the subject. That sterile marriages are increasing there can be no doubt. The causes leading to this condition are, however, most obscure. In all probability the more artificial and luxurious method of living which attends upon the development of modern civilization, is largely responsible. Luxury and indolence, often varied by prolonged periods of intense mental and nervous tension, result in stresses which greatly hinder the complicated procreative function.

In America especially is this true. It has been said that from 10 to 12% of all marriages are sterile; of these the husband is at fault in about 15 to 20%, while in the remainder the wife is barren, if we except that peculiar and happily small group of cases where the so-called sexual incompatibility exists and is a bar to fertile marital relations.

Sterility in women may of course be absolute and obviously without hope of relief. Congenital absence of any integral portion of the genital tract, inoperable atresia, destruction of the uterus, ovaries, or Fallopian tubes by reason of severe inflammatory processes or by surgical extirpation—such conditions will of course make imperative an absolutely hopeless prognosis as to the possibility of child bearing.

There are, however, a vast number of cases of relative or incomplete sterility, in which, by detailed study of the case, and the application of judicious medical or surgical measures, conception may become possible, and many unhappy couples be rendered fruitful and content.

It is these women who are so frequently driven to neurasthenia, or even worse, by

being informed after a casual examination by their family physician, often totally inexperienced in the more minute technique of gynecological diagnosis, that they can never bear children and must do as best they can without them. Much may be done in a critical and detailed study of such patients, who it is to be feared are rather neglected, because their condition is not one of illness, and does not appeal to the professional instinct of the physician.

Incomplete or relative sterility may be due to a large number of etiological factors, not by any means all due to disorders of the genital tract, though naturally by far the greater bulk of the cases are due to lesions of the reproductive organs. Certain constitutional diseases, general infection as tuberculosis, or abnormalities of metabolisms as diabetes may be sufficient to cause sterility, which may be corrected synchronously with the cure of the systemic disease.

The primary anemias, obesity, and rachitis may also be causal agents. Diseases of the genital tract which are amenable to surgical treatment form the large number of cases of curable sterility. The malpositions and deviations in form of the uterus, occlusion of the lumen of the Fallopian tubes, endometritis, and the presence of irritating discharges from the uterus or vagina; these, together with neoplasms, cause a large number of women to remain barren.

Most, if not all of the above diseases may be corrected, and every means available to the practitioner of medicine should be brought into use, in order that such cures if possible may be effected. No woman should be declared unable to bear children until after a most minute and careful study of the case, and after the skilled and scientific application of the indicated remedial measures, whether medical or surgical, have by their failure to produce the desired result demonstrated the fact that relief is impossible.

The cure of sterility in women is one of the most ideal results in medical endeavor, since the very mental attitude of the patient so intensely desirous of maternity, insures the greatest conceivable amount of devotion to the offspring, should such a consummation be rendered possible, and insures the addition of a carefully nurtured citizen to the community.

GONORRHOEAL ARTHRITIS.

The term gonorrhoeal rheumatism, although accepted and used by many authorities, is certainly erroneous. The symptoms of this form of arthritis appearing in general infections by the gonococcus are identical with the joint symptoms when there is no general septicæmia. Discovery of the causal organism in the joint fluids is hardly frequently enough reported to conclusively justify the name, but histological preparations of synovial membranes and cartilages have proven the exciting cause. Further evidence has lately been produced in conjunction with some experiments which were begun with the view of producing a curative serum. Rogers and Torrey (Journal of the American Medical Association, January 27, 1906) found that, contrary to the results of some others, they were able to produce a serum which had a therapeutic value.

Active immunity of man or animals to the gonococcus has never been produced; indeed in man one attack seems to predispose to subsequent infections. Animals, however, may survive many injections, but finally become fatally susceptible to doses which they previously endured with impunity. The gonococcus produces an endotoxin which is diffusible only at the death of the microorganism. Since animals are naturally resistant to the gonococcus, this germ may be killed by their blood upon injection and produce an anti-endotoxic body up to a certain point, after which their natural immunity gives out, for as yet undiscovered reasons.

At any rate some body is formed by this blood which will protect another animal from a fatal dose when this "immune" blood is injected before, coincidently with, or subsequent to the injection of the microorganisms.

This blood was used by the above mentioned observers in cases of gonorrhoeal arthritis with encouraging results. They found that if thirty to fifty minims of the serum of an animal which had been treated for a month with injections of gonococcus, grown in a richly albuminous fluid at intervals of five to seven days, were injected into patients suffering with gonorrhoeal arthritis, that there was, in forty-eight hours, a distinct relief of the symptoms, and later a favorable influence upon the entire course of the disease. They found that the urethral manifestations were little if any affected. Upon cessation of the serum treatment there was a tendency to recrudescence, which would subside upon further use of the antiserum. They noticed, moreover, that gonorrhoeal arthritis occurring in patients who had suffered from urethral gonorrhoea for a long time, or in whom the joint disease was subacute, required more serum and treatment for a longer time than patients in whom the disease pursued an acute course.

Although the authors do not make the statement, it may be inferred from their articles that the exciting cause of the inflammation is the toxin which is diffused through the tissues after the death and disintegration of the cocci, at which time it comes into re-

lation with the tissues for the first time. This assumption would seem tenable when we consider that active immunity is not produced and that recrudescences occur after cessation of treatment. During treatment all the toxin which is produced by the breaking down of the microorganisms is neutralized by the antiserum; but, after the injections have been stopped, more organisms are destroyed and more toxic material is thrown into the tissues in an unneutralized state. This would account for the recrudescences.

It appears that the human blood has not the ability to produce enough antibodies against the endogenous toxins of the gonococcus; or if enough antibodies are produced, they cannot get at the intracellular toxins, nor can they destroy the cocci; or else, having been formed, and not finding the toxins in solution, they are diverted.

At any rate, the results of the experiments of Rogers and Torrey are very encouraging whatever be their proper interpretation. Their work is still in progress and we hope to hear more from these researches which seem to be about to offer valuable assistance in this pathological and clinical entity which has so long withstood medical and surgical remedies.

SERUM THERAPY IN BASEDOWS DISEASE.

Serum therapy has been attempted for exopthalmic goitre under various conditions, by a number of investigators on the theory that if the disease was the result of hypersecretion of the thyroid gland, the thyroid secretion being considered to act as an antitoxin to certain products of metabolism, and injection of sufficient toxin into the system should neutralize the excess of antitoxin bringing about amelioration of the symptoms. Working upon this theory M. M. Ballet and Enriquez injected the blood serum of thyroidictomized dogs into nine patients suffering from Basedows disease, repeating the injections at intervals of three, five, and eight days according to the reactionary symptoms of the patient; two of the patients developed tetany, tinitis aurium and vomiting, seeming to show that the symptoms of tetany so often seen in thyroidictomized animals is due to some toxin in the circulation, but there was little improvement in the condition of the patients.

Burghart utilized the serum from a case of myxedema with some slight improvement of the symptoms, he also precipitated the serum of thyroidictomized dogs by alcohol and administered the dried precipitate with some results. Otto Lanz conceived the idea of utilizing the milk of thyroidictomized goats. He obtained favorable results. After several weeks of treatment the tachycardia was reduced, the goitre diminished in size, the tremors decreased, the appetite became normal and the insomnia disappeared.

A precipitate from the milk was also tried, the results being equally as good. Recently 'thyroidictine', the dried blood of thyroidictomized animals, has been placed upon the market, but the results reported so far have not been very encouraging. Madsens tablets of the dried blood is another preparation of the same kind. Murray has endeavored to produce an antitoxin by the injection of thyroid gland secretion into animals and utilizing the serum as an antitoxin to produce cytolysis of the thyroid but without success.

Up to the present but little success has attended the efforts of investigators to find an antitoxin of any therapeutic value in this disease. The most successful treatment of Basedows disease is a combination of electricity and medicine. For the application of electricity two flexible electrodes about 4x2 inches covered with flannel and moistened with warm salt solution are used, one of which is placed over the goitre and the other at the back of the neck, the current should be weak, only producing a slight tickling sensation, the application should be continued for an hour twice a day. Drugs when intelligently used are of the greatest service, for the tachycardia, tincture of strophanthus and convalaria act well, digitalis may also be indicated, arsenic seems to be of considerable value. Blue mass in doses of about gr. $\frac{1}{4}$ t. i. d. has a very beneficial effect reducing both the pulse rate and the tremor. Thymus gland has been recommended, and good results reported, but it is hardly probable that the dried extract of a gland which should have atrophied under normal conditions, and which is often persistant and enlarged in this disease, should have any beneficial effect. Thyroid extract is contraindicated except in certain cases occurring at puberty. The administration of iodin, preferably in the form of iodoform or aristol, is often beneficial and super renal from its being antagonistic to the thyroids in its physiologic action is at times of benefit. Surgical interference should never be undertaken except in extreme emergency, as the operation is dangerous and by no means a certain curative measure; Kocher, of Berne, claims 76% of cures by operation. In the present state of our knowledge the intelligent use of drugs combined with electricity gives the best results.

PERNICIOUS ANAEMIA.

The work of the last year in this disease has been chiefly in the blood-marrow changes, the nervous system and therapy. C. H. Bunting, in a very excellent article (Johns

Hopkins Hospital Bulletin, 1905, p. 171) says that "the unregenerating bone marrow of the 'aplastic' anaemias seems to indicate a general lack of resistance on the part of the organism against the toxic agent." He accepts the theory of a circulating toxin which has a haemolytic action on red blood cells in the circulation and in the marrow. He discovered that if he bled rabbits repeatedly, the bone marrow replied with nucleated red cells of the normoblastic type; but if he injected a hemolytic poison into the rabbits he was able to call forth at first normoblastic cells, but on continuation of the treatment the marrow gave up megaloblasts; and if the marrow itself were examined after such procedures, the normoblasts were absent, the megaloblastic type of cell having taken their place. He argues that the marrow under the influence of a hemolytic poison is deprived of its normoblasts and is obliged to supply embryonal types of cells in haste to fill the deficiency. The gravity of the case is directly proportionate to the number of megaloblasts in the circulating blood.

Inasmuch as he found neutrophilic and eosinophilic leucocytes and nucleated red cells in the spleen of pernicious anaemia cases, Kurpjeweit (Deutsches Archiv fur klinische Medizin, Bd. LXXX, Hft. 1&2) assumes that in this disease the bone marrow and spleen have some relation, the latter probably undertaking at least a part of the function of the former. In entirely normal spleens these elements were missing; nor were nucleated red cells, in any amount, found in the blood of his patient's antemortem. These two points were taken by the observer to corroborate his theory. The assumption of this appearance of the bone marrow by the spleen was not considered by the author as characteristic of pernicious anaemia, since he found the same elements in the spleens of chronic congestion and acute tumor, but in considerably fewer numbers.

In reference to the intestinal tract Faber and Bloch (Beitrage zur Pathologie der Verdauungsorgane, No. 1, '05) have proven conclusively that there is no atrophy of the intestinal mucous membrane, that found at autopsy being due to postmortem changes. The atrophy of the gastric mucous membrane is inflammatory in nature and of very slight degree, not sufficient to account for the achylia. This is also substantiated by Martius (Med. Klinik, '05, No 1), who, in view of these coinciding results, gives up the task of explaining achylia gastrica in the present light of our knowledge.

Clark (Brain, Winter, '04), tells us that the changes occurring in the cord in association with anaemia are the same as diffuse degeneration and subacute combined sclerosis, differing only in that the latter are more extensive, restricted to marked cord divisions and affect the periphery chiefly, whence they extend inward. These degenerations, one is led to believe, are toxic in origin, while the work of Faber and Bloch points out that they were found to arise from spreading and fusion of small areas of myelitis. Whatever may be their causation and mode of production, it is reasonably certain that they affect the posterior columns chiefly, whence they rarely extend, the symptoms caused by them never being very pronounced, and many times overlooked.

The remedy "par excellence" appears now, as ever, to be arsenic, even in cases dependent upon syphilis, where mercury does more harm than good. Naturally in those cases in which the aetiologic factor has been proven to be an intestinal parasite, the appropriate anthelmintics are indicated. The action of arsenic may be to directly stimulate the production of red corpuscles, or to the greater amount of albuminous plasma which is enabled to reach the tissues by its effect on the vessel walls; in this matter we are still in the dark. Bone marrow extracts have of course been strongly advised, but clinical experience has not proven that this remedy has as much value as was claimed it should have. If we accept the theory of toxaemi this does not seem strange, inasmuch as the therapeutic bone marrow has no antitoxic effect. A few cases have been reported this year of improvement with this therapeutic measure, but the true idiopathic nature, which is the true pernicious anaemia, can be well doubted, when we think of the immediate effect of a haemolysin. There seems to be no true blood preciptin or haemolysin 'in vitro' since there is no solution of the patient's corpuscles in his own serum; but as we know nothing of the relation of the erythrocytes and serum with one another or with the bone marrow 'in vivo', we are not able to hypothesize further.

The use of hydrodilimand and pepsin in cases of achylia gastrica has met with no good results. Naegeli suggests that cleansing enemata be used in cases of intestinal disturbances with putrefaction, to be followed by nutrient ones if the stomach be irritable. These latter are often-times refused.

Little has been added to our armamentarium in several years, but we now have knowledge of those forms of pernicious anaemia caused by intestinal parasites, such as anchylostomum duodenale, which naturally point to their proper treatment. How these parasites act is still a mooted point. In

our knowledge of facts which will guide us to a more scientific handling of our cases we have advanced very little.

ARTERIOSCLEROSIS.

The etiology of arteriosclerosis is yet under discussion, various theories having been advanced by pathologists, none of which have received general acceptance. Burwinkel maintains that arteriosclerosis is not a wasting disease, as it occurs most frequently in those who take very little bodily exercise, who are of sedentary habits and not among the working classes, he considers that alcoholism has little to do with its causation. He claims that the disease is the result of the decreased rapidity of the circulation and faulty combination of its ingredients, his treatment is the administration of inorganic salts of the blood plasma in their normal proportions.

Winternitz points out that all factors and habits of life have been accused of being the cause of the disease, ignoring the fact that there are different kinds occurring in youth and age, being partial or general, sometimes producing little damage, at other times endangering life. Remedial measures must therefore be directed to the circulation of the blood vessels and the chemical composition of the blood plasma. The disease commences with an injury to the median coat of the artery. Huchard considers that hypertension is not primary but is secondary to disease of the vessel walls and of the heart. According to Thomas the continuous action of the heart and vessels produces a strain upon the capacity for accommodation to the variations in the bulk of the circulating fluid, producing a gradual loss of elasticity with paralysis of the media, followed by dilatation of the vessels and decreased rapidity of the circulation, which in their turn react injuriously upon the vessels. Compensatory hypertrophy of the muscles follows which after a time becomes insufficient followed by the development of a layer of connective tissue which sometimes re-establishes normal circulatory conditions; sooner or later retrogressive changes set in, fatty degeneration of the new connective tissue occurs and areas gradually become atheromatous. If Burwinkel's theories are correct that the disease is the expression of a pathologic metabolic condition the rational therapy must be directed to acting favorably upon the metabolism of the vessel walls. Trunecek has used with success as have also Levy, Goldschmidt, Steinsberg and others, an antisclerosis serum which contains the inorganic salts of the blood in their normal proportions, by causing the patient to use a table water of this composition which acts upon the calcium phosphate and by increasing the alkalinity of the blood good results have been obtained. The reports of many of the leading clinicians go to prove that if the prepared water is taken as a beverage continuously, not only will the disease be arrested in its progress but in the majority of the cases marked improvement will take place.

DEATH OF DR. SOLOMON C. MARTIN.

Dr. Solomon C. Martin suddenly died from an attack of heart failure in St. Louis, March 28th, 1906, where he resided for forty years or more. In the death of Dr. Martin the medical profession has lost one of its most prominent members. He occupied during his long, useful life many positions of honor. He was originally a Southern man and served as a surgeon major of cavalry in the Confederate Army, and was for a great many years professor of Dermatology in the Barnes Medical College, St. Louis.

Dr. Martin previous to his death had been suffering from a mild attack of pneumonia and grip, but his family and friends had no idea that his illness would prove fatal.

LITHEMIA.

Since Garrod discovered the presence of excess of Uric Acid in the blood in gout volumes have been written upon the Uric Acid diathesis and every ill to which flesh is heir has been attributed to its presence in excess in the blood or tissues, and patent nostrums, elegant preparations and natural waters have been advocated as specifics for its solution and elimination. Since Haig published his most fascinating book, which commanded more attention from its charming, convincing literary style than from its scientific merits, there has been a reaction of medical opinion and Uric Acid is looked upon now as a symptom of a perverted metabolic condition of the functions of the liver rather than a definite entity in the causation of the varied symptoms associated with its presence in excess in the blood or urine. The arguments advanced by the advocates of Uric Acid diathesis were plausible if not convincing, they stated that if the urinary elimination was decreased the Uric Acid stored in the tissues was the cause of the symptoms, if the elimination of Uric Acid was excessive then the symptoms were due to excess circulating in the blood, as for the treatment, it was the same in both cases, the dream of the ancient physician of a universal medicine seemed to be on the point of realization. In a short time the profession recovered from the hypnotic effect of Dr. Haig's charming book and today the pendulum has swung to the opposite extreme and the Uric Acid diasthesis as a factor in disease, especially as regards mental perversions, is neglected. A few years ago the newspapers propounded two

questions, the answering of which became the fad of every one who was capable of putting pen to paper. Is life worth living? Is marriage a failure? To both of which Dr. Haig and his disciples replied, "That depends on Uric Acid." Pessimism, misanthropy, melancholia, suicide were, according to this school, the result of too much Uric Acid in the tissues. Irritability, sexual exaltation and depression were due to the same cause, even incompatability of temper of those whom God hath joined together was due to the difference in the amount of Uric Acid in the circulation; by proper diet and the use of Uric Acid solvents the divorce court should have become a relic of a prescientific era, the insane asylums would have become sanitariums from which came only a continuous stream of Uric Acid in combination with a perfect solvent, the penitentiaries would have been empty and the millenium have arrived. That our mental condition depends very largely upon the condition of our liver is generally admitted, the fear of impending, undefined danger, the precordial anxiety, which attacks every man occasionally with greater or less severity is generally removed by a purgative and abstinence in diet, is proverbially of hepatic origin, if the urine be examined during one of these attacks there will be found a marked increase of Uric Acid owing to the failure of the liver to oxidize it, the mental depression might remain as long as the liver fails to perform its function and the Uric Acid be eliminated in excessive quantities. The Uric Acid eliminants are usually either salicylates or alkalies which act by increasing the alkalinity of the system and by stimulation of the secretions, thereby eliminating Uric Acid and being the most effective alteratives at our command.

1849. 1906.

PRELIMINARY ANNOUNCEMENT of THE FIFTY-THIRD ANNUAL MEETING OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA, CHARLOTTE, N. C., MAY 29, 30 and 31, 1906.

General Information.

County medical societies not having already filed their annual reports for 1906 with the Secretary are requested to send them in immediately.

Gentlemen representing their county societies in the House of Delegates will please bring evidence of authority.

The Board of Medical Examiners will meet in Charlotte, Wednesday afternoon, May 23, 1906.

The Medical Society of the State of North Carolina will meet in Charlotte Tuesday, May 29, 1906, and will remain in session Wednesday, Thursday, and **possibly Friday**, if **occasion demands.**

The various railroads have agreed to extend the customary reduced rates of one and one-third fares. Pay full fare going, being careful to secure a receipt therefor from the local agent selling the ticket, which receipt countersigned by the Secretary and local railroad representative at Charlotte entitles to a return fare of one-third. Be particular to take receipt on standard form.

The Mecklenburg County Medical Society and the citizens of Charlotte are much interested in the success of the meeting and every effort will be made to render the occasion one of the most successful meetings the Society has had.

The attendance gives promise of being very large.

Reception Tuesday evening at the Colonial Club.

Banquet Wednesday evening at the City Hall.

The scientific features of the session will be ample and of a high grade.

Chairmen of Sections who have not already sent in titles of papers will kindly do so without delay.

Gentlemen expecting to read papers before the Society are kindly requested to have same type-written and in duplicate as this will materially facilitate both the early publication of the papers and the issuing of the volume of transactions.

The General Meetings will be held in the Civil Court Room, County Court House.

The House of Delegates will meet in the Criminal Court Room, County Court House.

The following hotels are mentioned by the local committee as being prepared to entertain the members attending the Society:

Central Hotel, rates, $2.50 to $3.50.

Buford Hotel, rates, $2.50 to $3.50.

Leland Hotel, rates, $1.50.

Queen City Hotel, rates, $1.50.

The Final Program will be issued about May 25. It will include all papers to be presented to the Society, each in its appropriate Section, and with date of expected delivery indicated.

Gentlemen with titles on the program will receive copies about date of issue.

With our large and interested membership the number of titles is necessarily large, and gentlemen will kindly bear in mind that every effort will be made to secure time for each paper, but authors should be as concise as possible.

Officers and Committees—1906.

President—Dr. Edward C. Register, Charlotte.

First Vice-President—Dr. L. B. McBrayer, Asheville.

Second Vice-President—Dr. W. H. H. Cobb, Jr., Goldsboro.

Third Vice-President—Dr. W. O. Spencer, Winston.

Secretary—Dr. J. Howell Way, Waynesville.

Treasurer—Dr. Ginnada T. Sikes, Grissom.

Council.

First District—Dr. Oscar McMullan, Elizabeth City.

Second District—Dr. James M, Parrott, Kinston.

Third District—Dr. Frank H. Russell, Wilmington.

Fourth District—Dr. Albert Anderson, Wilson.

Fifth District—Dr. Jacob F. Highsmith, Fayetteville.

Sixth District—Dr. Hubert A. Royster, Raleigh (Secretary).

Seventh District—Dr. Edward C. Register, Charlotte (President).

Eighth District—Dr. David A. Stanton, High Point.

Ninth District—Dr. Thos. E. Anderson, Statesville.

Tenth District—Dr. James A. Burroughs, Asheville.

Orator—Dr. James M. Parrott, Kinston.

Essayist—Dr. Thomas S. McMullan, Hertford.

Leader of Debate—Dr. Samuel D. Booth, Oxford.

Members House of Delegates American Medical Association—Dr. J. Howell Way, Waynesville! Dr. James A. Burroughs, Asheville.

Committee on Public Policy and Legislation —Drs. R. H. Lewis, Raleigh; Geo. G. Thomas, Wilmington; P. L. Murphy, Morganton; (ex officio) Edward C. Register, Charlotte; J. Howell Way, Waynesville.

Committee on Publication—Drs. Geo. W. Pressly, Charlotte; H. McKee Tucker, Raleigh; (ex-officio) J. Howell Way, Waynesville.

Committee on Finance—Drs. D. A. Stanton, High Point; C. J. Sawyer, Windsor; S. P. J. Lee, Dunn.

Committee on Scientific Work—Drs. R. H. Whitehead, Chapel Hill; O. C. Daniels, Oriental; (ex-officio) J. Howell Way, Waynesville.

Committee on Obituaries—Drs. C. M. Poole, Craven; H. H. Harris, Wake Forest; Kemp P. Battle, Jr., Raleigh.

Committee of Arrangements in Charlotte —Drs. Robert L. Gibbon, J. R. Ervin, E. R. Russell, W. O. Nisbet, R. J. Brevard, E. C. Register (ex-officio), Messrs. R. H. Jordan and P. M. Brown.

Chairmen of Sections—1906.

Anatomy and Surgery—Dr. Lawrence E. Holmes, Asheville.

Materia Medica and Therapeutics—Dr. J. Clegg Hall, Boardman.

Practice of Medicine—Dr. E. C. Boyette, Mt. Holly.

Physiology and Chemistry—Dr. S. A. Stevens, Monroe.

Obstetrics—Dr. Cyrus Thompson, Jacksonville.

Gynaecology—Dr. Chas. W. Mosely, North Wilkesboro.

Medical Jurisprudence and State Medicine —Dr. W. F. Hargrove, Kinston.

Pathology and Microscopy—Dr. Thos. R. Little, Greensboro.

Railway Surgery—Dr. Robert L. Gibbon, Charlotte.

Paediatrics—Dr. Eugene H. Brooks, Reidsville.

Delegates to Virginia Medical Society—Drs. Samuel D. Booth, Oxford; Cyrus Thompson, Jacksonville; J. B. Knight, Williamston; J. E. Grimsley, Greensboro; R. A. Whittaker, Kinston; J. A. Burroughs, Asheville.

Delegates to the South Carolina Medical Association—Dr. J. R. Gordon, Jamestown; Dr. D. J. Hill, Lexington; Dr. Ben S. Herring, Wilson; Dr. W. R. Kirk, Hendersonville; Dr. D. A. Garrison, Bessemer Ciey.

Delegates to Mississippi Valley Medical Association—Dr. R. E. Mason, Charlotte; Dr. J. A. Stevens, Clinton; Dr. S. M. Mann, Moyock; D.. J. A. Turner, High Point; Dr. W. P. Horton, North Wilkesboro; Dr. H. H. Dodson, Greensboro.

Board of Medical Examiners, 1902-'08—Charles O'H. Laughinghouse, President, Greenville, Obstetrics and Gynaecology; Geo. W. Pressly, Secretary, Charlotte, Chemistry and Pharmacy; M. H. Fletcher, Asheville, Physiology and Hygiene; James M. Parrott, Kinston, Anatomy and Histology; A. A. Kent, Lenoir, Practice of Medicine; J. T. J. Battle, Greensboro, Materia Medica and Therapeutics; Frank H. Russell, Wilmington, Surgery.

The North Carolina State Board of Health —Geo. G. Thomas, M. D., President, Wilmington; S. Westray Battle, M. D., Asheville; H. W. Lewis, M. D., Jackson; T. E. Anderson, M. D., Statesville; W. P. Ivey, M. D., Lenoir; J. Howell Way, M. D., Waynesville; W. O. Spencer, M. D., Winston-Salem; J. L. Ludlow, C. E., Winston-Salem; Richard H. Lewis, M. D., Secretary and Treasurer, Raleigh.

EXTRACTS FROM BY-LAWS.

Chapter I.—Membership.

Sec. 1. All members of the component county societies shall be privileged to attend all meetings and take part in all of the proceedings of the annual sessions, and shall be eligible to any office within the gift of the Society.

Sec. 2. The name of a physician upon the properly certified roster of members or list of delegates of a chartered county society which has paid its annual assessment shall be prima facie evidence of his right to register at the annual session in the respective bodies of this Society.

Sec. 4. Each member in attendance at the annual session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of his society he shall receive a badge, which shall be evidence of his right to membership at this session. No member or delegate shall take part in any of the proceedings of the annual session until he has complied with the provisions of this section.

Chapter 3—General Meetings.

Sec. 3 Except by special vote, the order of exercises, papers, and discussions, as set forth in the official program, shall be followed from day to day until it has been completed

Sec. 4 **No address or paper before the Society, except those of the President, Orator, and Essayist, shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes, nor more than once on any subject.**

Sec. 5. All papers read before the Society shall be its property. Each paper shall be deposited with the Secretary when read, and if this is not done it shall not be published.

Preliminary Program.

Society called to order at 9:30 a. m. in Civil Court Room, County Court House, by Dr. Robert L. Gibbon, Chairman of Committee.

Invocation, M. D. Hardin, D. D.

Addresses of Welcome by Mayor S. S. McNinch and Hon. T. C. Guthrie.

Response to Addresses of Welcome, Dr. Wm. A. Graham, Durham.

The President's Annual Address: The Importance of Establishing a Higher Standard of Preliminary Education for Students of Medicine, Dr. Edward C. Register, President, Charlotte.

The Annual Oration, Dr. James M. Parrott, Kinston.

The Annual Essay, Dr. Thos. S. McMullan, Hertford.

The Annual Debate. Leader of Debate, Dr. S. D. Booth, Oxford.

"Colony" Treatment of the Insane and Other Defectives, Dr. P. L. Murphy, Morganton.

Spleno-Medullary Leukemia, with Report of Cases, Dr. Wm. DeB. MacNnder, Chapel Hill.

Suggestions as to Cause of Epilepsy, Dr. J. J. Mann, Louisburg.

Albuminuria in Diagnosis, Dr. D. M. Prince, Laurinburg.

Nephritis, Dr. Ben K. Hays, Oxford.

Suggestions as to Diet in Nephritis, Dr. D. D. Hooper, Sylva.

Pneumonia, Dr. J. B. H. Knight, Williamston.

Observations on Pneumonia, Dr. T. E. Asbury, Asbury.

Pneumonia as Seen in North Carolina Practice, Dr. T. C. Bullock, Antryville.

Broncho-Pneumonia Complicating Measles, Dr. J. G. Burton, Spencer.

Treatment of Pneumonia, Dr. Lloyd P. Russell, Fletchers.

Therapeutic Nihilism and Pneumonia, Dr. N. P. Coppedge, Margaretsville.

The Relations Existing Between the Upper Air Passages and the Lungs, Dr. R. V. Brawley, Salisbury.

Obstructions of the Upper Respiratory Tract, Dr. H. H. Briggs, Asheville.

Personal Observations on Typhoid Fever, Dr. B. R. Hunter, King's Mountain.

Incidental Observations on Hydrophobia, Dr. Davis Furman, Greenville, S. C.

Typhoid Fever as Seen in Graham County, Dr. S. F. Howell, Robbinsville.

Treatment of Typhoid Fever, J. M. Matthews, Mt. Pleasant.

The Treatment of Goitre, Dr. Annie L. Alexander, Charlotte.

Some Points in Clinical Psychiatry of Interest to the General Practitioner, Dr. I. M. Taylor, Morganton.

Dysentery, Dr. T. M. Riddick, Woodville.

Acute Articular Rheumatism, Dr. E. C. Boyette, Mount Holly.

Treatment of Acute Articular Rheumatism, Dr. W. H. Anderson, Wilson.

Mitral Insufficiency, Dr. O. L. Ray, Raleigh.

Sunstroke, Dr. B. M. Haynes, Cliffside.

Intestinal Indigestion, Its Rational Treatment, Dr. J. E. Ashcraft, Monroe.

Clinical Report on Pseudo Leukemia, Dr. W. B. Crawford, Goldsboro.

Some of the Duties and Requirements of Country Practice, Dr. A. S. Pendleton, Henderson.

The Doctor and His Patient, Dr. W. A. Goode, Waco.

Physicians' Use of Automobiles, Dr. J. R. Alexander, Charlotte.

The Psychology of Inebriety, Dr. S. M. Crowell, Charlotte.

Epidemic Jaundice, Dr. J. B. Wright, Granite Falls.

Dysentery, Causes and Management, Dr. J. H. Peeler, Granite Quarry.

Malaria as Seen in Gaston County, Dr. T. C. Quickel, Stanley Creek.

Malarial Fever, Dr. J. M. Newbern, Jarvisburg.

Obstruction of the Bowels, Dr. W. B. Moore, Smith.

The Best Methods to Limit the Spread of Typhoid Fever, Dr. W. P. Horton, North Wilkesboro.

The Test Diet in Intestinal Diseases, Dr. W. O. Nisbet, Charlotte.

Morphinism, its Dangers and Treatment, Dr. F. M. Winchester, Charlotte.

Sarcoma of Superior Maxilla Removed under Local Anaesthesia, Dr. Earl Grady, Tryon.

The Underlying Causes of Tuberculosis, Dr. Paul Paquin, Asheville.

Unjustifiable Negligence in the Diagnosis of Pulmonary Tuberculosis, Dr. M. Eugene Street, Glendon.

The Early Diagnosis of Tuberculosis, Dr. W. M. Jones, High Point.

The Prognosis of Pulmonary Tuberculosis, Dr. James Sawyer, Asheville.

The Individual Who Happens to be Tuberculous, Dr. W. L. Dunn, Asheville.

The Infection Dangers in Pulmonary Tuberculosis, Dr. J. Howell Way, Waynesville.

The Physician and His Relation to Tuberculosis as a Social Problem, Dr. T. A. Mann, Durham.

Tuberculosis in Infancy and Childhood, Dr. E. B. Glenn, Asheville.

Tuberculosis in Our Southern Blacks, Dr. W. T. Griggs, Poplar Branch.

Tuberculosis, Dr. K. M. Ferguson, Southern

Pines.

Tuberculosis of the Hip Joint, Dr. E. C. McEachern, Cordova.

Treatment of Tuberculosis, Dr. Arthur R. Guerard, Flat Rock.

The Surgical Treatment of Tuberculosis of the Cervical Lymphatics, Dr. John Gibbon, Philadelphia, Pa.

The Rational Treatment of Tuberculosis, Dr. W. R. Kirk, Hendersonville.

The Use of Cotton Seed Oil in Treatment of Pulmonary Tuberculosis, C. D. Thompson, Lowesville.

Tuberculosis, Prevention and Cure, Dr. C. A. Julien, Thomasville.

Personal Experiences in the Treatment of Pulmonary Tuberculosis, Dr. Edwin Gladmon, Southern Pines.

Marasmus, Dr. E. H. Brooks, Reidsville.

The Treatment of Infantile Teething, Dr. J. Stevens Brown, Salisbury.

Some Practical Suggestions for the Care of Infants, Dr. Chas. G. Roberson, Greensboro.

Success in Paediatrics and How to Attain It, Dr. E. A. Hines, Seneca, S. C.

A Brief Consideration of Summer Diarrhoea in Infants, Dr. J. R. Paddison, Oak Ridge.

The Value of the X-Ray in Paediatrics, Dr. J. Thos. Wright, Winston.

Acute Osteomyelitis in Children, Dr. Jno. H. Tucker, Henderson.

Evil Effects of Mouth Breathing, Dr. R. J. Teague, Durham.

Scarlatina, Dr. C. G. Bryant, Roaring River.

Infantile Diarrhoeas, Dr. A. A. Nichols, Painter.

Personal Experiences With Diptheria, Dr. W. H. H. Cobb, Goldsboro.

Methods of Diagnosis in Diseases of Children, Dr. Geo. W. Norman, Thompsonville.

Congenital Heart Lesions, Dr. W. T. Parrott, Kinston.

Mechanical Treatment of Diptheria, Dr. J. T. Wright, Winston.

Arithritis Deformans, Dr. L. E. Holmes, Biltmore.

A Plea for More Frequent Autopsies, Dr. J. P. Monroe, Davidson.

Modern Methods in the Study of Human Anatomy, Dr. Lewis M. Gaines, Wake Forest.

Where the Tides Meet, H. S. Lott, Winston.

On Washing the Hands, H. A. Royster, Raleigh.

Chronic Ulcers, G. A. Brown, Mount Ulla.

Varicocele, Haematocele, Hydrocele, E. F. Strickland, Bethania.

Moist Surgical Dressings, Dr. B. R. Graham, Wallace.

Gall Stones and Diseases of the Gall Bladder, Dr. Henry F. Long, Statesville.

X-Ray Treatment as a Preventive of Recurrence Following Extirpation of Malignant Growths, Dr. W. D. Witherbee, Charlotte.

Present Status of the Treatment of Cancer, Dr. L. B. McBrayer, Asheville.

Neoplasms and their Treatment, Dr. W. O. Spencer, Winston.

Appendicitis From the View Point of the General Practitioner, Dr. E. L. Stamey, Greensboro.

The Early Diagnosis and Treatment of Appendicitis, Dr. Geo. R. Dean, Spartanburg, S. C.

Management of Post-Operative Abdominal Sections, Dr. R. S. Primrose, New Bern.

The End Results, Mental, Physical, Psychical, After Ablation of Certain Structures and Organs of the Human Body, Dr. J. E. Stokes, Salisbury.

Report of a Rare and Interesting Case of Brain Surgery, Dr. A. S. Harrison, Enfield.

The Omentum; Its Importance to the Abdominal Surgery, Dr. J. F. Highsmith, Fayetteville.

The Treatment of Necrosed Bone, Dr. J. A. Williams, Reidsville.

Trephining With Modern Instruments, Dr. H. M. Wilder, Charlotte.

Report of Surgical Cases, Dr. D. T. Tayloe, Washington.

Report of a Case of Trephining for Epilepsy, Dr. W. A. Graham, Durham.

Glaucoma, Dr. C. W. Banner, Greensboro.

Senile Cataract, Dr. W. H. Wakefield, Charlotte.

Displacement of the Kidney, Dr. Guy L. Hunner, Baltimore, Md.

The Surgery of the Mastoid, Dr. R. D. Jewett, Winston.

Report of Three Cases of Eye Surgery, Dr. O. M. Whisnant, Charlotte.

The Result of Ghonorrhoeal Infection in Females, Dr. H. B. Weaver, Asheville.

Are We Doing Our Duty in Trying to Prevent the Spread of Venereal Disease, Dr. J. H. Marsh, Fayetteville.

The Imperfect Development of Certain Organs a Factor in the Genesis of the Special Diseases of Women, Dr. B. S. Moore, Charlotte.

The Curettement of the Uterus, Dr. M. A. Royall, Yadkinville.

Post-Operative Leucorrhoea, Dr. C. M. Strong, Charlotte.

Vesical Calculi in the Female, Dr. A. M. Caveness, Wakefield.

Extra Uterine Pregnancy, 14 Cases and One Death, Dr. J. W. Long, Greensboro.

Report of a Case of Unusual Type of Ectopic Pregnancy, Dr. Chas. Z. Candler, Dillsboro.

Mental Therapeutics, Dr. W. J. McAnally, High Point.

Belladona: A Study of One of the Common Drugs, Dr. R. E. Mason, Charlotte.

Kindred Basic Principles Exemplified in Common Modes of Therapy, Dr. D. A. Stanton, High Point.

The Open and Gauze Method of Administering an Anasthetic, Dr. Wm. Moncure, Raleigh.

Portable Water and Its Value, Dr. C. S. Jordan, Asheville.

Serum Therapy, Dr. T. G. Hamrick, Caroleen.

Photo Therapy, Dr. T. M. Copple, Winston.

An Ideal Physician, Dr. Jno. T. Burrus, High Point.

National Recognition of the Medical Profession, Dr. Oliver Hicks, Caroleen.

The Physician's Obligation to His Fellow Man J. E. Brooks, Greensboro.
Immediate and Remote Influences of County Medical Organizations, Dr. J. C. Grady, Kenly.
Why Physicians Should Study Chemistry, Dr. H. B. Hoyle, Jonesboro.
When the Baby Comes, Dr. Cyrus Thompson, Jacksonville.
Report of Obstetric Cases, Dr. N. D. MacArtan, Ocracoke.
Management of the First Stage of Labor, Dr. H. McKee Tucker, Raleigh.
Pernicious Vomiting of Pregnancy, Dr. J. W. Wood, Shelby, R. F. D.
Chorea Gravidarum, Dr. J. M. Templeton, Cary.
Placenta Praevia, Dr. H. H. C. Mills, Charlotte.
Forceps in Labor, Dr. L. D. Wharton, Smithfield.
Pueperal Eclampsia, Dr. M. R. Adams, Statesville.
Notes on Puerperal Eclampsia, Dr. W. C. Folger, Dobson.
Eclampsia, Dr. J. W. McGhee, Reidsville.
Clinical Report on Puerperal Eclampsia, Dr. J. F. Badgett, Blackwells.
Notes on Etiology and Treatment of Eclampsia, Dr. R. G. Rozier, Lumberton.
Notes on Puerpereal Eclampsia, Dr. Raymond Pollock, Dover.
Country Obstetrical Practice, Dr. S. E. Koonce, Wilmington.
Caesarean Section, With Clinical Report, Dr. J. L. Hanes, Winston.
Puerperal Sepsis, Dr. J. B. Phillips, Jr., Tarboro.
Asphyxia in the New Born, Dr. C. J. Sawyer, Salisbury.
Clinical Reports: Two Caesarean Sections, One Umbilical Fistula, Dr. W. H. Dixon, Edward.
A Difficult Craniotomy, Dr. L. C. Keerans, Charlotte.
Imperforate Hymen at Full Term, Dr. H. S. Lott, Winston.
Practical Points in Obstetrics, Dr. Albert Anderson, Wilson.
Perinaeal Lacerations, Prevention and Treatment, Dr. W. F. Mitchell, Shelby.
The Antipathic Influence of the Normal Body Secretions, Dr. H. D. Stewart, Monroe.
The Use of the Microscope in General Medicine, Dr. E. A. Lockett, Winston.
Un-United Fractures, Dr. S. E. Greenwood, Fletcher.
Carcinoma of the Penis, Dr. Thomas M. Green, Wilmington.
The Value of So-Called "Conservative or Plastic Operation on Appendages," Dr. Wm. M. Polk, New York.

Review of Southern Medical Literature.

Southern Medicine and Surgery, March, 1906.

Pneumonia.—Dr. W. B. Williams says that stupes and poultices are calculated to do more harm than good, as it is possible to maintain an even temperature of the surface by their use, and besides this the linen is often soiled and the patient made generally uncomfortable. Ice to the chest has prominent endorsement, but it seems to me that anything that reduces the surface temperature contracts the capillaries and adds more volume to the already overtaxed pulmonary circulation. A cotton jacket enveloping the entire body to entice capillary circulation and only disturbed for examination is an ideal dressing. A blister may be used on the fourth or fifth day and dressed through the jacket. I am not in favor of strychnine and digitalis from the beginning, as it is like sinking spurs deep in the flanks of a running horse who is already straining every nerve and muscle to its utmost capacity, which can only result in earlier failure of the vital forces before the crisis is reached. But if kept in reserve until the home stretch then we can expect incalculable good to be accomplished by strychnine, digitalis, and other supporters. But the most important point in treatment where toxemia is marked is to overcome the poison, and for this purpose creosote, guiacol, and aspyrin have been used. But just now the eyes of the profession are turned toward the biological laboratory for a serum with which to combat this disease, and there is much favorable report of the anti-pneumococcus serum administered in 20 c. c. doses twice a day until recovery or crisis is past. While we wait for the perfecting of the serum therapy we must content ourselves to maintain the strength of the heart and patient and meet any complication that may arise. Hydrochlorate of quinine hypodermically $7\frac{1}{2}$ grains reduces fever. If venesection is not deemed advisable in early stage nitroglycerine will relax the capillaries and for a time relieve pulmonary engorgement. In threatened heart failure when alcohol, digitalis, and strychnine fail adrenalin may tide over the critical period and as a last resort hypodermoclysis and oxygen.

Gaillard's Southern Medicine, Mnrch, 1906.

A Few Remarks on the Principles Governing Rontgen Therapy.—Dr. E. G. Williams believes that the X-Ray is a form of radiant energy that influences the molecular or atomic activity or vibrations, which activity or vibrations in organic matter are intimately concerned with the vital principle or that force which animates matter and gives it life. That the ray seems to effect the vital principle appears first from the fact that dead organic matter is not at all affected, however strong and long the ray

is applied; secondly, immediately after a destructive exposure to the ray there is no material or organic change, gross or macroscopical, and the changes that do develop are similar to those which are consequent upon the deprivation of the life of a part; and thirdly the only immediate effect of the ray is a functional one as the relief of pain which is often observed. The action of the ray therefore upon living tissues seems to be a dynamic one, that is it influences the vital force and does not influence the cells or tissues, as do mechanical, chemical, or other physical agents such as heat. There seems to be at first an increase of the vital principle, then a cessation; or at first stimulation, then destruction. The more vital principle the cells contain the more does the ray effect them. Since the vital principle is more active in cells nearer the embryo we can now perhaps explain why the ray has a selective effect upon the spermatozoa and ova and the cells of malignant growths which are embryonal in character. Further the selective action is explained by the fact that malignant tumors have a very large proportion of cells and the vital principle in them is very active. Next in order of their relative proportion of cells are the epithelial tissue of glands, hair follicles, and the skin, and lastly connective tissue and muscle. The effect upon the last two classes of tissues may be secondarily due to the inflammatory processes initiated by the destruction of the cellular elements. The cells are deprived of their life. They now act as foreign bodies and disintegrate, bringing about phogocytosis, infiltration of round cells and proliferation of the endothelium of the blood vessels and the consequent interference with the circulation, which causes a degeneration of the muscles and connective tissues. More will doubtless be found out about the effect of the ray upon the function of different organs, especially upon those of the nervous system. He concludes by emphasizing the fact that we are at present only establishing the basic principles of the Rontgent ray and that which has already been accomplished is but a faint forecast of its possibilities in the future.

The Southern Clinic, March, 1906.

Bronchitis and Broncho-Pneumonia in Children—By Dr. Wm. A. Wood, Gallatin, Mo.

Atlanta Journal-Record of Medicine, March, 1906.

Prostatic Albuminuria not an Infrequent Cause of Error in the Diagnosis of the so-called "Orthastatic" "Postural" "Physiol ogical" and "Cylic" Albuminuria.—In this paper Dr. E. G. Ballenger brings out the following points:

1. Diseased prostrates, like diseased kidneys, secrete albumen. The secretion from the normal gland is not albuminous, or it is present in such small quantity that unless the seminal vesicles are massaged the urine passed will not give the tests for albumen.

2. This is apparently a constant symptom of chronic prostatitis and may be depended upon in the diagnosis.

3. Prostatic albuminuria seems to be an appropriate name for this condition.

4 In making insurance examinations as well as in the diagnosis of obscure forms of albuminuria this possibility should be eliminated with the other sources of contamination before reaching a positive conclusion.

5. The periodic increase in the prostatic discharge along with the striking similarity between the symptoms of "intermittent" "postural" "orthastatic" and "cylic" albuminuria and prostatorrhea makes the possibility of mistake in the diagnosis extremely likely when this fluid flows back into the bladder and does not appear at the meatus.

6. This regular increase every 10 to 30 days and the analogy between the uterus and the prostate suggest a relationship between the causes of this condition and menstruation.

The American Practitioner and News, March, 1906.

Treatment of Tubercular Fistula in Ano.—Dr. E. O. Witherspoon in comparing the operation of excision and incision by means of the cautery favors the latter for the following reasons: First, it does not require anything like the length of time to perform that excision operation requires, thus necessitating less anesthetic, and the anesthetic is a very serious proposition in the majority of these cases, especially those patients who have other manifestations of tuberculosis. Second, you have an open wound to deal with, which can be easily cleansed and dressed. Thirdly and principally you are not running the chances of infection from the germ present that you are in the excision operation, as the cautery seals up the tissues as it passes through them leaving no exposed area. Fourthly, there is no hemorrhage from the cautery operation. On the other hand in the excision operation should the fistula have more than one branch there is danger of cutting into the tract itself, thus rendering the whole field liable to infection, also there is more hemorrhage. The question of hemorrhage, however, should be of very little concern in these days of surgery as it is so easily controlled in these operations as not to figure as any factor of importance.

The Medical Recorder, March, 1906.

Lacerations of the Perineum.—Dr. T. F.

Kittrell believes that the operation should be suited to the case. The object of the operation is to place the parts in as nearly normal condition as possible. In recent tears in the median line silk worm gut sutures deeply passed from the thin surface and encircling the tear will bring the parts in apposition very nicely. When tears extend into one or both sulci the vaginal portions of them may be nicely united by the lifting stitch of Emmet. Catgut is good in these cases, but are generally supplemented by one or two silk worm gut and then close the skin wound by one or two encircling stitches, one of which should catch the end of the posterior column. Operations for complete lacerations require the rectal tear to be sutured from within rectum by catgut or silk worm or silk sutures. The former cut short, the latter left long enough for the ends to protrude from anus; two or three fine catgut sutures should bring the ends of the sphincter together, and then a deep silk worm gut should be passed through thin surface back of retraced ends of sphincter, so as to lift and hold the ends together, taking tension off the fine catgut. In the second operation in these cases one should be sure to denude the surface carefully after marking off with scalpel the area to be denuded. We should be very careful to denude ends of sphincter, so that they may be brought accurately together. In old cases the ends of the sphincter will be far retracted until that muscle forms an almost straight bundle of fibers situated transversely behind anus; the ends can be located easily by a little dimple on either side posteriorly.

The Virginia Medical Semi-Monthly, March 9th, 1906.

Principles of Surgery Lecture XVI—Aseptic Surgical Technique—Preparation of Patient for Operation—Preparation of Operating Room and Accessories—After Care of Patient—Technique in Country Practice.—By Dr. Stuart McGuire, Richmond, Va.

Texas Medical Journal, March, 1906.

Gross Abnormalities of the Appendix Vermiformis Noted in 3550 Autopsies.—Dr. A. P. Heineck draws the following conclusions from these post mortem records:

1. That it is almost always an intraperitoneal organ; exceptionally it is extraperitoneal and then usually only partly so. 2. That it has been found in nearly every portion of the abdominal and pelvic cavities. 3. That it may form the contents or part of the contents of a hernial sac. 4. That its presence in a hernial sac does not render it immune from the lesions to which it is subject when normally located. 5. That it may be adherent to any intraperitoneal organ or structure. 6. That it may be adherent to some extraperitoneal structures, kidney retrocolic, cellular tissues, etc. 7. That pathological conditions have been found which seem to indicate that inflammations can extend from it to neighboring organs and structures to which it is adherent, and vice versa. 8. That in the diagnosing of obscure abdominal and pelvic conditions the probability of a previous or of an existing appendicitis must be considered. 9. That pus may be present within the cavity of the appendix, within the walls of the appendix, or the condition of peri-appendiceal abscess may occur. 10. That inflammations of the appendix may terminate in resolution, in adhesion, in formation, in obliteration of the appendix (partial or complete), in interstitial thickening, in gangrene, ulceration and perforation of the organ; may terminate in suppuration. 11. That one attack of appendicitis predisposes to other attacks until complete obliteration of the lumen of the appendix has taken place. 12. That the condition of supernumary appendix does not occur. 13. That congenital absence of the appendix, if it occurs, is so infrequent as to be ignored from a clinical standpoint. 14. That the appendix may vary in length from ½ c. m. to 26 c. m. 15. That the lodgment of foreign bodies in the linnen of the appendix is an infrequent occurrence, only two cases excluding enteroliths having been observed. 16. That neoplastic disease of the appendix is uncommon. The author has never met with a primary case. Some primary cases have been reported. 17. That this organ may be the seat of lesions of the same nature as can occur in other portions of the elementary canal, viz., typhoidal tubercular, etc. 18. That tuberculous appendicitis is almost invariably secondary. 19. That the lessened frequency during the last decade of diffuse suppurative peritonitis following operations for appendicitis is due first to more exact diagnosis; second to earlier operation; third to excision of the appendix and of its mesentery in cases not complicated by peri-appendiceal abscess; fourth its better and more perfect technique on part of operator. 20. To limiting the surgical intervention in cases of peri-appendiceal abscess to incision and evacuation and drainage of the pus cavity if the appendix be not easily accessible.

Nashville Journal of Medicine and Surgery, March, 1906.

Trigeminal Neuralgia.—Dr. B. M. Ricketts after discussing the subject draws the following conclusions: 1. Avulsion of the distal branches should be the first operation resorted to. 2. Avulsion with ligation of common and external carotid arteries should be second choice. 3. Removal of the branches

of the nerve (Laxer) should be third choice. 4. Lexer method combined with that of La Place the fourth. 5. Lexers method combined with that of La Place and ligation of the common and external carotid arteries the fifth. 6. Removal of the ganglion and neurectomy of the distal branches the sixth. 7. Removal of the ganglion combined with neurectomy and ligation of the common and external carotid arteries the seventh. 8. Neurotomy, neurectomy, or the injection of osmic acid is only temporary relief. 9. Plugging the foramena with fragments of bone cut from the neighboring plate will prevent regeneration of the nerves passing through them. 10. The method of Kronlein is an innovation, having given better results with less deformity, mortality, loss of time, motor paralysis, and less risk to loss of vision. 11. Relapse occasionally occurs after intracranial operations, but in such cases removal of the ganglion is supposed to have been incomplete. 12. All intracranial operations for the removal of the ganglion should be abandoned because of the high mortality, if for no other reason.

The Mobile Medical and Surgical Journal, March, 1906.

Fibroid Tumors.—Dr. A. N. Talley Roach says that fibroids are usually of slow growth, although some attain abnormal size in a year or two. The muscular coat and endometrium undergo marked changes. There is a great hypertrophy of the muscular coat while the endometrium undergoes atrophy and various inflammatory changes. Fibroid tumors during menstruation become enlarged and soften. The fallopian tubes and ovaries undergo cystic degeneration producing hydrosalpinx, pyosalpinx and haematosalpinx. A fibroid tumor may become sarcomatous from degeneration. Conception very rarely takes place in a fibroid uterus on account of the distorted condition of the endometrium and hemorrhage. The causes of fibroids are unknown. Usually associaed with fibroids is peritonitis, due to pressure interference with the circulation and salpingitis. They are found from ten years to thirty-five years, being most prolific from twenty-five to thirty five. The negro race is more prone to fibroids than the white. Hemorrhage is the chief symptom, being seen as a continuous oozing or else as a severe and prolonged bleeding during menstruation. Conditions other than pregnancy that may be mistaken for fibroids are ovarian cysts, retroflexion and anteflexion. Prognosis of fibroids themselves is generally favorable, but they may endanger life in various ways. They may undergo sarcomatous degeneration. Continuous loss of blood produces profound anemia. After the menopause the development is usually arrested. By pressure on uterus and intestines they may cause death. The heart is always affected from the increased work it has to do. Surgical interference is the only hope we have to make a cure. Hypodermic injections of ergot have been recommended, but they are unsafe and liable to terminate fatally. Hemorrhage may be checked by curettage and rest in recumbent position. Ligation of the uterine arteries has been recommended. The operations usually performed for uterine fibroids are salpingo-ophrectomy and hysterectomy.

The Texas Medical News, March, 1906.

Hemorrhoids.—Dr. C. E. Belcher says to thoroughly examine with rectal speculum or otherwise all those cases presenting themselves in the female you will be surprised to find in many cases a constriction leading to reflex conditions not thought of previously, and will often discover a corresponding enlargement in other parts near by due to relaxation from lack of nerve tone, though reflex from anal stenosis and contraction. Treatment of hemorrhoids with other conditions noted above is that of careful but forceable dilitation for several weeks up to a point of overcoming all constriction to a point of restoring the anal orifice and lower rectum to a normal size. Author uses for this purpose the self-retaining glass pile plugs, beginning with the smallest size and in two or three weeks using the next size and so on until the larger one is easily inserted and all constriction overcome; until the sphincter muscles of the anus are completely tired out and overcome and the parts restored once more to normal state. An emollient and slightly astringent unguent should be used each time the plugs are inserted; the patient should be instructed to sit quietly for half an hour, retaining the plug and to forget themselves, particularly that part in question. See to it if possib e that the patients forget they ever had an anus (they have had their attention attracted to that part altogether too much), it will lift off the strain, and there are no reflexes without strain. If necessary use cocaine when first inserting each sized plug. As a rule the patient will place them themselves afterward. As a rule early morning injections of warm water with fountain syringe is indicated during the treatment. The cascaras carefully administered also assist. Avoid irritants, encourage your patient, and see constipation and piles melt like dew in the summer morning and with them pass the many annoying reflexes due to their presence; the long-suffering victim to their pangs welcoming with a "glad smile" and helping hand the doctor. The knife, the

cautery, the ligature, the injections, all leave a cicatrix; restoration to normal size obliterates them.

Virginia Medical Semi-Monthly, March 23rd, 1906.

Scorbutus in Infancy.—Dr. Loren Johnson believes that scurvy in children is one of the most interesting and elusive diseases which the practitioner is required to diagnose and treat. It is interesting because of the rapidity with which it yields to the proper treatment and on account of the various etiological factors. It is elusive in its nature on account of its diagnostic difficulties, as it may simulate so many other conditions; and there is hardly a disease which flesh is heir to which when rightly diagnosed and rightly treated will give such prompt and apparently wonderful results. Many a physicians reputation is made in a community by clearing up a puzzling and painful train of symptoms by the addition of orange juice to a scorbutic diet. There is no disease which is oftener wrongly diagnosed in its early stages than scurvy, and simply the physician in considering the probabilities in any given cases does not consider scurvy as a possibility. Of course if the spongy, bleeding gums are in evidence our attention is immediately directed in the right direction, for that is the one cardinal symptom of scurvy which we always have in mind. When, however, we are called to see a case of hematuria we consider some bladder or kidney trouble. When our attention is called to the fretting and crying out during its bath, or when handled, we think possibly of its teeth fretting it, of the weather being too hot or too cold, or of some indigestion. When on examination we find a swelling along the thigh or along any of the long bones which may be tender and which seem to effect the babies general condition badly the surgeon may think of an osteosarcoma, and more than one infant has been operated upon for this condition under a mistaken diagnosis. Intestinal and stomach hemorrhages may suggest ulcer. Marked protuberances of the eyeball may suggest some growth behind the eyeball. Purpuric spots over the body may suggest any of the different purpuras and, finally, probably the most common mistake is to consider the painful and swollen legs as evidence of rheumatism. Yet scurvy may be ushered in by any one of the above symptoms without any evidence of spongy gums. Hence the terms "interesting" and "elusive" apply very well in this condition. Therefore, it would seem good practice to always make orange juice or beef juice a part of all infants diet.

New Orleans Medical and Surgical Journal, March, 1906.

Acute Affections of the Pharyngeal Tonsil in Early Life.—Dr. Homer Dupuy draws up the following conclusions on this subject, viz: 1. Head colds in early life are generally characterized by an acute inflammation of the pharyngeal tonsil—the nasal phenomena being purely secondary. 2. Apart from the many minor ailments caused by acute adenoiditis profound systemic disturbances sometimes follow. 3. The post-nasal tonsil being a terminal lymph node acts as an avenue of infection for the cervical lymphatic glands; treatment, therefore, of the tonsilar affection offers a very rational protective measure for the prevention of acute lymphoadenitis in the region of the neck. 4. Early and active treatment of recurrent pharyngeal tonsilitis will sometimes prevent a chronic enlargement of the post-nasal lymphatic deposit. 5. Prophylaxis addressed to the upper air passages will consist essentially in nasal and post-nasal cleanliness the ideal being attained when the child's nose and naso-pharynx will receive nearly the same attention we bestow upon the teeth.

Remarks on Melancholia.—Dr. E. M. Hummel recommends the following treatment: Of all those so unfortunate as to become affected mentally melancholiacs are entitled to most sincere sympathy and consideration, especially at the hands of the physician, because they suffer most acutely. Great palliation of the psycholgia incident to the tedium of intense emotional depression and apprehensive pain with agitation can be accomplished with opium. The drug should be exhibited in small doses, gradually increased until the symptoms are relieved and then withdrawn. Physomotor restlessness is benefited by the prolonged hot bath or pack. Sleep may thereby be induced. Insomnia, which is sometimes persistent, usually yields to mild hypnotic drugs such as paraldehyde. The digestive function almost always torpid should be stimulated and sodium phosphate should usually figure in the prescription. Much else can be done on symptomatic lines, but the measure is not an unusual one and suggests itself. Prognosis is good in the larger number of cases though the course of illness is usually protracted, interrupted by relapses, and not uncommonly is there a permanent emotional dullness after an otherwise fair recovery. Owing to the paramount tendency of this class of patients to harm themselves attempts at suicide must be anticipated and guarded against.

The Southern Practitioner, March, 1906.

Bronchitis and Broncho-Pneumonia in Chil-

dren.—Dr. Wm. A. Wood says that bronchitis is a very common disease of infancy and childhood. It is variable in extent and intensity. It begins with cough, hoarseness, difficulty of respiration, and febrile excitement. There may be soreness of the throat, coryza, sneezing, and a watery condition of eyes. It may be ushered in with a chill or a chilliness, with languor, exhaustion and drowsiness, followed later by more or less fever. The pulse becomes frequent with a rise in the temperature. The cough may be slight at first but increases in proportion to the extent and intensity of the inflammation. When it is frequent and severe it will be accompanied by more or less pain and soreness at the base of the sternum, but the face does not express the same degree of suffering as in cough of pneumonia. The respiration in mild cases is but little accelerated, but in severe cases it is short, difficult and oppressed, and is attended by a wheezing or rattling sound heard first in the throat but subsequently over the whole of the chest. The physical signs in acute bronchitis in very young subjects are a combination of mucous and sibilant rhonchi. In older children these sounds are more marked, especially the mucous rhonchi. When the inflammation extends to the more minute ramifications of the bronchi the general symptoms are correspondingly aggravated. We have now the capillary bronchitis of the older writers, which is exceedingly dangerous, generally terminating in death, sometimes in a few hours. Every case of bronchial catarrh should be regarded as the beginning of a pneumonia. In the commencement of an attack of bronchitis a small dose of calomel and Dovers Powder, followed with castor oil and salines, will be of service. Quinine now in small doses should be given at short intervals for about two days. Alternated with a prescription containing ipecac, squills, senega, hyoscyanis. The child should be kept warm with flannel next to the skin, should remain in bed, the room at a uniform temperature of not less than 65 degrees F., and should be given mucilaginous drinks or barley water with nourishment as will best meet the wants of the system. Fomentations or hot cloths applied to the chest will often be of service. If there is much prostration give prescription containing aromatic spirits of ammonia, senega, squills. In children of eight years and upward the muriate of ammonia in small doses may be substituted for the aromatic spirits of ammonia. Of course symptoms as they arise must be met. It may be necessary to resort to aconite or digitalis or alcoholic stimulants.

Maryland Medical Journal, March, 1906.

Physiology so-called and the Cigarette.—Dr. L. K. Hirshberg calls attention to the exaggerated errors perpetuated in the American public school text-books of physiology and hygiene. Most of these wild exaggerations are endorsed by the W. C. T. U. or its branches in the different States. These well-intentioned, but ill-informed, enthusiasts insist upon the incorporation of terrifying descriptions of the evils of tobacco and alcohol in public school text-books which are to teach the sciences of physiology and hygiene. The majority of smokers may use tobacco moderately (about six pipes equals three cigars which equals 10 or 15 cigarettes) for many years and suffer no ill effects. The true danger of over-indulgence include chronic throat conditions, pharyngitis, laryngitis and bronchitis due to the irritant alkaline vapor. Cancer of the tongue and lip may be blamed upon the irritation. Irregularity of the pulse may be rarely attributed to tobacco. Quotation from text-book, "Tobacco a powerful narcotic, contains a substance called nicotine. A single drop if put on the tongue of a dog will soon kill the animal. An ordinary cigar contains nicotine enough to kill two men if taken pure." Here are three little sentences containing four big lies. Tobacco is not a narcotic, a single drop of it (tobacco or nicotine) will not kill a dog in the manner described, and an ordinary cigar used in the ordinary way containing its usual amount of nicotine will not kill two flies. In the same chapter on cigarettes—they are one of the worst possible preparations of tobacco. The smoke of the paper wrappings is irritating to the lungs and cigarettes send more poisonous fumes into the delicate air cells than a pipe or cigar would do." The smoke of the paper wrappings has never been proved irritating to the lung cells, even when inhaled, so this statement remains subjudice. They do not send more poisonous fumes into the lung cells, and are only one-fifth as strong as a pipe and one-tenth as strong as the average cigar. How can the observant children who study this so-called physiology accommodate these statements with their personal knowledge of their brothers, fathers, uncles, and most men they meet using tobacco? Although chemists throughout the world, and government, experts in particular, are constantly on the lookout and are analyzing cigarettes daily no narcotic, such as morphine, belladona, hyoscine or similar drug, has ever been found in them. It would be just as easy to find whiskey in milk when taken from the dairy.

Book Notices.

The Economic Power of the Railroads.

Aside from the unfailing production of foodstuffs in sufficient quantities to supply our own people at reasonable prices, the largest economic concern of the United States today is that just and stable conditions shall exist for the transportation of the vast agricultural surplus of the Middle West to the markets of Europe. This matter is of vital importance to many more people than one might at first thought suppose. It involves prosperity or the lack of it on the part of a very large majority of the forty millions who live between the Alleghenies and the Rockies; it affects all of the ports of the country through which produce passes, or ought normally to pass, on its way to the foreign market; and it goes far toward determining the cost of food-supplies in Europe, and consequently the standard of life of the consuming masses.

The maintenance of natural, fair, and stable conditions for foreign commerce depends, of course, upon a variety of things, —notably upon the preservation of international peace, upon tariff regulations, and upon the ratio of supply and demand. These are the factors, chiefly, which determine the amount of our foreign trade and the countries among which it is distributed. In addition there is the multifold railroad problem, affecting the amount in no small degree, but in a much more important way influencing the routes of trade and fixing the geography of our commercial prosperity. It is the railroads that make and unmake agricultural districts, inland cities, and shipping ports. It is they that have it in their power by their rivalries and manipulations of rates to condemn to stagnation vast sections of the country which have enjoyed commercial vigor, to force into prosperity others which have been conspicuously backward, and, as a result, from time to time to alter the whole *morale* of our international trade. From "Railroad Rates and the Flow of Our Foreign Trade," by Frederic Austin Ogg, in the *American Monthly Review of Reviews* for April.

Ellis' Demonstrations of Anatomy. Twelfth Edition. Revised and Edited by Christopher Addison, M. D., F.R.C.S. London: Smith, Elder, & Co.

The issue of this new edition of Ellis' "Demonstrations of Anatomy" marks a great change in the general character of the work, for the recent advances in anatomy have involved very considerable alterations in the text, and the higher standard of modern anatomical illustrations has necessitated many changes in the former diagrams. The matter has been re-arranged, and now follows the order of dissection as carried out in the Edinburgh, and in practically all other medical schools.

We may say at once that these changes have completely altered the status of the work, and now give it a place among the best manuals for students.

The text of the volume is satisfactory, and has been brought into accordance with the most recent anatomical descriptive work, while still retaining the completeness as well as general character and features of former editions. The illustrations of the dissections have been greatly improved by the addition of colour to many of them, and many additional illustrations have been inserted.

Those dealing with the abdominal cavity and viscera are perhaps the best of them, and include reproductions of several from Dr. Addison's own work upon the topography of the viscera, which are excellent. The figures illustrating the thoracic cavity are not nearly so good, and Fig. 170 is even a misleading representation of the arch of the aorta.

The figures of the bones, with the muscular attachments indicated in colour, constitute an improvement, but most of them are on too small a scale, and the coloured areas give only a general indication of the areas of attachment.

The preparation of an edition containing so many changes must have involved a great amount of work on the part of the editor, and we can congratulate him upon the degree of success which he has attained in bringing the work up to the standard of modern requirements in a book of the kind.

Diseases of Children. A Text-book for the use of students and Practitioners of Medicine, by C. Sigmund Raue, M. D., Clinical Professor of Pædiatrics at Hahnemann College, Philadelphia. Visiting physician to the Children's ward and Chief of the Children's Clinic, Hahnemann Hospital. Pædiatrist to the West Philadelphia Hospital. Second edition. Revised and enlarged. 61 illustrations. 776 pages. Cloth, $5.00. Half Morocco, $6.00. Philadelphia. Boericke & Tafel. 1906.

The writer is greatly pleased to see this work come into a second edition. It is the most thorough, concise, and up-to-date work on pediatrics in our school.

The chapter on clinical examination contains some valuable information that can be used almost daily. The charts showing the relation of the size of the head to that of the chest and the table of height and weight for given ages, are most useful. The author has laid great weight on hygiene and nursing and infant feeding, treating these sub-

jects in a clear, concise and easily comprehendible manner. His medical treatment is entirely homeopathic and clear cut indications are given for each drug.

The Jungle. By Upton SinClair. New York. Doubleday, Page & Co. Price, $1.50.

This book is a queer document of Socialist propaganda which Mr. SinClair has promulgated under the title of "The Jungle." The author presents in the first half of his book a study of social conditions. It purports to be a plain, straightforward statement of the lives of workers in the Chicago packing houses and of the methods by which those enterprises flourish. It is not a pretty story. So long as Mr. SinClair writes about the stock-yards it is difficult to escape the conviction that he has informed himself of his subject. About the middle of the book the leading character, a young Lithuanian, runs away from the hopeless struggle for existence in the stockyards. In turn he becomes hobo, thief, political "heeler," strikebreaker and street beggar. It is impossible to withhold admiration of Mr. SinClair's enthusiasm, and yet many socialists will regret his mistaken advocacy of their cause.

The Medical Disease of Infancy and Childhood with points on the Anatomy, Physiology and Hygiene peculiar to the Developing Period. By Alfred Cleveland Cotten, A. M., M. D., Professor of Pediatrics Rush Medical College, University of Chicago; Attending Physician for Diseases of Children Presbyterian Hospital; Consultant to the Central Fire Dispensary, etc., etc. Formerly physician in charge of the Chicago Isolation Hospital and of the Infectious Disease Wards of the County Hospital. Member of the XIII International Medical Congress, Moscow. Honorary Member of the Societe d'Hygiene, Paris, etc. Philadelphia and London: J. B. Lippincott Company. 1906.

On account of limited space, though the book contains 600 pages, case record and temperature charts have been omitted and discussions and opinions upon mooted subjects have been greatly restricted. The author wisely considers that a more thorough preparation for the study of clinical pediatrics than is afforded by a general knowledge of the Anatomy and Physiology of adult life is so evident that he has devoted considerable space to these subjects with reference to the developing period.

Part I is practically a revision of the author's previously published lessons on Anatomy, Physiology, and Hygiene of Infancy and Childhood. The subject of infant feeding, always of paramount importance, is treated broadly in the hope of stimulating a genuine interest in principles rather than a blind following of dogmatic formulae.

The book contains 670 pages and its illustrations are very numerous and beautiful.

Nursing: Its Principles and Practice for Hospital and Private Use. By Isabel Hampton Robb, Graduate of the New York Training School for Nurses attached to Bellevue Hospital; Late Superintendent of Nurses and Principal of the Training School for Nurses, Johns Hopkins Hospital, Baltimore, Md.; Late Superintendent of Nurses Illinois Training School for Nurses, Chicago, Illinois; Member of the Board of Lady Managers Lakeside Hospital, Cleveland, Ohio; Honorary Member of the Matrons' Council, London, England. Third edition. Revised and enlarged. Illustrated. Cleveland: E. C. Koeckert, Publisher, 715 Rose Building. 1906.

In preparing the third edition of this book the book has been carefully written and fifty-three pages have been added. The arrangement has been altered somewhat, chapters II and III have been combined to form chapter II, and chapters VIII and IX to form chapter IV. Two new chapters have been added and elsewhere new material has been substituted for old. The first chapter has been entirely changed. Instead of the schedule for a two years' course a suggestive outline for the division of work over the three years of instruction, which is made to include a six months' preliminary course, has been given. This preliminary course has been so arranged that during this period a definite amount of practical and theoretical work is covered. A class of probationers is made up for the spring and autumn, each class being divided into five sections, A, B, C, of group I, and D, and E, of group II, with an equal number of pupils in each section. At the end of a certain number of weeks the sections exchange work, until the entire course, lasting over a period of six months, is covered. Classes, lectures and demonstrations occupy the afternoon hours. It is not intended that the probationer shall do any actual nursing during the morning hours from 7 to 11, but from 5 to 7 in the afternoon she is required to perform certain domestic duties in the wards under the observation and criticism of regular instructors, who must be graduate nurses of experience. By this method the probationers will become practically familiar with all the details of the methods employed in each department, and will be taught their relation to the care of the patient before they are called upon

to undertake actual nursing duties. This arrangement at the same time will relieve the nurses of much of the domestic side of the work and thus enable them to devote more time to the actual nursing with the result that the patients will receive better care. The book is intended more for large hospitals that are in a financial condition to carry out this perfect system. For nurses in a small hospital where it is not practical to be so systematic it is not practicable.

The Examination of the Function of the Intestines by Means of Test-Diet, Its Application in Medical Practice and its Diagnostic and Therapeutic Value. By Prof. Adolf Schmidt, Physician-in chief of the City Hospital, Freidrichstadt in Dresden. Authorized Translation from the latest German Edition by Charles D. Aaron, M. D., Professor of Diseases of the Stomach and Intestines in the Detroit Post Graduate School of Medicine; Clinical Professor of Gastroenterology in the Detroit College of Medicine; Consulting Gastroenterologist to Harper Hospital, etc. Philadelphia: F. A. Davis Company, Publishers. 1906. Price $1.00 net.

This book owes its origin to a series of lectures which the author delivered in the summer of 1903. The sum up for medical purposes the results of the author's continued investigations and observations for about eight years. The desire to obtain an examination for the function of the intestines, that could be carried out in practice, analogous to the usual examinations of the stomach contents, and to advance by means of it the diagnosis and therapeutics of the diffuse intestinal diseases, in the same way as it has already been accomplished in the pathology of the stomach, was the incentive which led the author to write this book. The book is thoroughly practical—it is suitable for the general practitioner. The author has accomplished in eliminating what might appear complicated methods and has greatly simplified his methods of diagnosis.

The book is a very interesting little volume and contains 91 pages.

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared original articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Opthalmology, Otology, Rhinology, Laryngology. Hygiene, and other topics of interest to students and practitioners by leading members of the medical profession throughout the world. Edited by A. O. J. Kelly, A. M , M. D., Philadelphia, U. S. A., with the collaboration of Wm. Osler, M. D., Oxford; John H. Messer, M. D., Philadelphia, Jas. Stewart, M. D., Montreal; J. B. Murphy, M. D., Chicago; A. McPherson, M. D., Toronto; Thos. M. Rotch, M. D., New York; John G. Clark, M. D., Philadelphia; James J. Walsh, M. D., London; Edmund Landolt, M. D., Paris; J. W. Ballantyne, M. D., Edinburgh; John Harold, M. D., London; Richard Kretz, M. D., Vienna. With regular correspondents in Montreal, London, Paris, Berlin, Vienna, Leopsic, Brussels, and Carlsbad. Volume I. Sixteenth Series, 1906. Philadelphia and London: J. B. Lippincott Company. 1906.

The International Clinics are already well known. The volume that has just been received is especially of great value. While many writers well known by the medical profession are represented in this volume the articles by James Tyson and Nicholas Senn are especially of very great value. The volume contains 309 pages. It has many beautiful illustrations and is bound in the usual attractive style.

Abstracts of the Leading Articles of the Month.

Importance of the Lymph Nodes as Protective Organs Against Tuberculosis.

Bartel (Wiener klin. Woch.) brings out some interesting points. One of the ideas set forward is that the lymphocytes are an important factor in the fight the human host wages against invasion by the tubercle baccillus. The basis of this assumption is in the fact that the normal lymphocytes of the sheep, when mixed with virulent tubercle bacilli for a proper length of time, cause them to lose their virulence so that they can be injected into guinea pigs without infecting this usually susceptable animal with tuberculosis. On the basis of this experiment the author suggests the use of tubercle bacilli that have been in contact with lymphocytes until their "destructive" properties are lost as are effectual vaccine material for the production of active immunity against tuberculosis. He thinks that the lymphocyte-producing organs (lymph glands of activly immunized animals, will mitigate or heal tuberculous affections of other animals if injected into the same.

Complete Suture, Without Drainage, in Early Operations for Appendicitis.

Boreilus (Zent, fuer Chir.) says that in very many cases the abdomen can be just as well closed without drainage as not. This is more true the earlier one operates because at an early period the appendix is usually not perforated, and there is little or no infectious matter if there is fibrin on the peritoneum, nor, indeed, does a serious exudate alone de-

mand drainage. In sixteen out of forty-three early acute cases, the writer closed the abdomen completely. They all healed perfectely and left the clinic on the seventeenth day. The average time that patients treated by drainage have remained in the hospital is thirty-eight days, consequently, one sees what gain is expressed in the author's proposition. The outhor looks for the appendix and tries to remove it in absolutely every instance.

Treatment of Arteriosclerosis.

Barr (British Medical Journal) believes that the most potent disease in the production of arterial degeneration is syphilis. Typhoid fever plays a considerable part in the induction of the disease, as do acute rheumatism, diphthria, septicaemia, influenzia, malaria, etc., He has for some time suspected the toxin of the colon baccillus as being an important factor; examination of the blood of arterio-sclerosis shows that in 55 per cent. of the cases it gave complete agglutination with the colon baccillus, as compared with only 20 per cent. with the blood from persons free from arteriosclerosis.

Among mineral poisons, lead must be mentioned as having a direct action on the blood vessels and kidneys. High arterial tension being the precursor of artesioscelerosis, all pressor agents, such as coffee tea, digitalis, must be looked on as playing a part in the causation of the disease. Although alcohol is credited as one of the most potent factors in arteriosclerosis, it really has but little to do with it, except as it leads to the production of gout. The excessive use of nitrogenous foods kills more adult men than alcohol—the mischief being due to the waste products. The disease is essentially one of late adult life, and differs from senile vascular degeneration; it is much more common in men than in women they suffering more frequently from syphilis, having more mental worry, and being subjected to more physical strain. Repeated pregnancies often lead to the disease. Long continued exposure to cold often leads to degenerative changes in the peripheral vessels. American men, as a race, are especially prone to the disease.

The diet is of the greatest importance; it should be of low proteid value, as adults perform their muscular work with carbohydrates. How to eat is as important as what to eat. One should never eat until he has an appetite, then eat slowly, masticate thoroughly, and never to repletion. Exercise is of the greatest importance; so long as the exercise is not excessive for the individual, the more one gets out of doors the better. A course of baths often does much good. He rarely prescribes digestive agents or hypnotics; failure to eat or sleep requires treatment, not palliation. The thyroid preparations are extremely useful, and iodine is often even more valuable. The latter is best given as tincture or syrup of iodine. Adrenalin and the chlorides are pressor agents, and should never be given alone. Nitrates are useful in emergencies, but their effects are too evanescent for continued use. The benzoates frequently give excellent results, especially where the kidneys are involved.

On the Superiority of Abdominal Hysterectomy Over Vaginal Hysterectomy.

Hartmonn (Annals de Gynecol. et d'Obstet.) thinks that the abdominal method of performing hysterectomy has steadily gained ground during recent years, till at the present time it is a better and safer operation than that performed per vaginam. In support of this vlew he brings forward various statisties, and opines that that the success of the operation is due to our increased knowledge of asepsis, antisepsis and technique. With regard first of all to operations on the uterine appendages, the writer says better results, both immediate and late, from the abdominal operations, even in suppurative cases. Abnominal infection is easily avoided by limiting the field of operation by sterilised compresses in the raised pelvic position, while ligature of vessels as they are cut (and not en masse), pelvic peritoneal autoplasty, combined with removal of the uterus, give better results, both immdiate and late. He has practised the abdominal operation in preference to the vaginal for years, and gives his results in a series of cases, from September 1st, 1896, to June 1st, 1905. In 201 abdominal operations for inflammatory lesions of the appendages there were three deaths, equal to 1.49 per cent. mortality; 139 were cases of abdominal castration for bilaterla inflammatory lesions (98 being suppurative, 41 non-suppurative), with one death from parotitis and lung complications. In the previous series, January 1st, 1893, to September 1st, 1896 his mortality has been 3.22 per cent. The writer attributes his improved results, immediate and late, to better technique, especially the separate ligature of vessels, the removal of the damaged uterus, and the covering in of raw surfaces by careful pelvic peritoneal autoplsty. Great stress is laid on the latter proceeding, as it lessens the risk of infection and avoids the possibility of subsequent adhesions which may later lead to so much trouble. With regard to fibroids, there is no question that the abdominal route is the better. He records 77 cases of hysterectomy since September 1st, 1896, with one death, or a mortality of 1.42 per cent. Taking cancer (epithelioma), the author records four radical operations performed by the abdomen and three by the vagina. The frequency of recurrence after vaginal hysterectomy leads the author to think that in the treatment of cancer, simple curettage, followed by energetic cauterisation, yields equally good results to that even of hysterectomy. As regards the route chosen in hysterectomy for cancer, much depends on the fatness of the abdominal walls or the narrowness of the vagina, though the latter difficulty may be overcome by incisions into the vaginal walls or perineum. Hartmann

agrees with Segond, de Routeir, and de Richelot on the usefulness of removing pelvic glands in cancer. The danger in cancer of the cervis is its return in the vaginal wall and parametrium, and the author thinks that given a suitable case the best operation for cancer is that of Wertheim—removal of the uterus by the abdomen, with the adjacent paramentrium and upper extermity of the vagina. Next taking the question of hysterectomy in puerperal infection, Hartmann advises the abdominal, and not the viginal route, owing to the friability of the tissues and the risks from haemarrhage. He appears to make light of the risk of peritoneal infection in such cases. Hysterectomy for prolapse is lastly considered. Here again the abdominal route is advised; the elongation of the supra-vaginal cervix and the vascularity of the peri-uterine tissues renders the viginal operation more difficult than is generally believed. Again the enlargement of the uterns, either due to fibroids or from other causes, makes the abdominal route preferable, while it also allows of fixation of the cervical stump to the abdominal wall. In either method vagino-perineal plastic operations shauld be performed in addition.

Experiments on the Inoculation of Monkeys With Sypihlis.

Neisser (Deutsch. Med. Woch.) in his work, carried on last year in Batavia, is the beginning of an experimental period of study into the nature of syphilis, made possible by Metchnikoff's and Roux's and Nesser's own preliminary work about two years ago. The results already obtained are very important; their importance lies, however, mainly in the suggestiveness with which they point to the further course of investigation to be taken. They can be detailed here only in great shortness: The period of incubation in monkeys lasts mostly three to five weeks. For inoculation, deep scarifications were made, into which the material was rubbed. Greater certainty of results obtained for material from florid and fresh stages of the disease. Primary glands, condylomata, mucous patches and papules served best. In one case infection was obtained by material from tertian lesion. Inoculation with blood or serum did not succeed. Of internal organs the spleen, bone-marrow, lymphatic glands and testicles caused infection; negative results followed the use of the spinal cord, ovaries, liver, lung, kidney, suprarenals and muscles. It was impossible to demonstrate different degrees of virulence. It seemed in some cases that by the continued passage through a series of monkeys the virulence was rather increased. Higher monkeys are more susceptible than the lower ones; in the latter, infection in only possible by way of the genitalia or the eyebrows. In the higher monkeys, the general condition was greatly interfered with; primary swellings of lymphatics were very conspicuous; general papulous eruptions were seen in a number of gibbons. Localized eruptions and local returns were frequently observed.

It is a very interesting fact that he never succeeded in causing infection by subcutaneous inoculation. It seems that a healthy organism destroys the virus in the subcutaneous connective tissus. He has been led to believe that it will be possible to increase the production of antibodies in an infected organism by subcutaneous injections of the virus. In view of the skin immunity, he assumes that immunity may exist against the own parasites, but not against those of other individuals. A general rule for the time in which immunity is established cannot be given. The time in which the virus is generally disseminatedover the organism was found to be varying, but not longer than fifty-four days; the experimental data were ob tained by inoculation of the internal organs, as above mentioned. It is very important that the administration of mercury did not influence either the development of the primary effects nor the generalization of the virus. As to immunization, he calls attention to the fact that the way of causing attenuation of the virus by passage through lower monkeys does not appear very hopeful, as he has shown that even in them generalization occurs. It must not be forgotten, however, that the organs of lower monkeys cause infection much less frequently than those of anthropoids. Only the testicle here forms an exception and seems to retain the virus even more tenaciously than the lymphatic glands. His seach for spirochaete pallida was not always successful; he himself admits, however, that he did not give much attention to it on account of lack of time, and he pronounces the etiolobic quality of the spirochaete as highly probable.

The Diagnosis of Stones in the Common Duct.

Ehret (Muench. Med. Wochen.) says that for an absolute diagnosis of stones in the common duct, it is important first of all to have made an absolute diagnosis of cholelithiasis, and secondly to have noted that the stool of the patient in question has at least contained bile pigments from time to time. This last is not absolutely necessary, for cases have been noted in which the feces have been entirely free from bile pigments for a very long period of time and choledochus stones have been demonstrated. The temperature curve in these cases is quite characteristie. The temperature is normal for a long period of time with paroxysms of fever developing at periods varying from once a week to once in twelve weeks. The temperature frequently rises 41 degrees C. and through a crisis returns in a few days to the normal. Togather with this periodical temperature there is regularly an ieterus varying from a very mild to a very severe type. Even after the temperature returns to the normal the icterus will continue in a very mild degree for a very long period of time. With the elevation of temperature this mild degree of

icterus again becomes very severe. Unlike gall-stone disease in general, there is an absence of pain and tenderness, and this is quite as characteristic as the symptoms just mentioned. The writer claims, therefore, that cases presenting paroxysmal elevations of temperature, regularly associated with icterus, in the absence of pain, unquestionably have stones in the common duct.

Treatment of Blenorrhea with Conjunctivitis in Adults by the Organic Solutions of Silver.

Darier (Archives D'Ophtalmologie) reports the good results which he has obtained by treating cases of blenorrhagic conjunctivitis in adults with argyrol. The write recommends the employment of this agent in conjunctivitis marked by gonococci, but advises recourse to nitrate of silver if there are corneal complications which seem not to be avoided. If a case is taken in the very beginning the instillations of argyrol should be made every half hour in 10 to 15 per cent. solutions, and twice a day a prolonged bath of the eye with 25 per cent. solution. Washing of the eye with permanganate of potash, hyposulphite of soda and borated water should also be employed. If at the end of two or three days there is not a marked improvement, the argyrol should be used every half hour with a strength of 20-100 per cent. and the eye should be washed twice a day with protargol in 20 per cent. solution. If in spite of this treatment the chemosis does not diminish and the lids remain indurated, we should not hesitate to use cauterizations twice a day with a solution of nitrate of silver 2 or 3 per cent. As prophylaetic of blenorrhea of the conjunctiva the organic solutions of silver proved very successful; argentamin of 10-100 per cent. as well as protargol give very good results. Their effects are much superior to that obtained from nitrate of silver. Recent statistics taken from the Maternity of Basle, show that among 3,000 newly born there was only one case of infection. These results are better than those obtained by nitrate of silver, and confirm those reported two years ago by Veverka at the Maternity of Prague. It is then more than probable that argyrol is not so favorable in prophylaxis of blenorrhea of the conjunctiva as protargol, and this without causing the least pain to the newly born.

Treatment of Tuberculosis.

Cheyne in the London Medical Lancet discusses the method of A. E. Wright, consisting in (a) the use of tuberculin and its control by testing the opsonic index of the blood to rise the bacteriotropic powers of the blood; and (b) promoting the flow of the lymph. The theory is that the body defends itself against bacterie invasion by the development in the blood serum of substances termed opsonins, each bacterium leading to the development of its special opsonin, which, coming in contact with the living bacteria, weakens them and enable the phagocytes to complete their destruction. He holds that the determination of the opsonic index depends too much upon the personal equation of the observer; further, that opsonins and phagocytes do not constitute the whole means of defense of the body against tubercle bacilli. Wright states that strictly localized infections do not tend to get well. This is only true in the case of lupus. If the surgeon employs substances which produce a flow of lymph through a tuberculosis sinus, he is very liable to set up a mixed infection which tuberculin has much less power to cure. Tuberculin is a most valuable adjunct to surgical treatment, and should certainly be used. But to do away with all operation and blindly to convert the physician into an immunizator world, in the writer's opinion, be a totally retrograde step.

Glycosuria and Albuminuria, Significance of Slight.

Burnet in the British Medical Journal thinks it may be said that the presence of albumin in any appreciable amount in the urine is not normal or physiological, but that it does not necessarily imply that the existing disturbance of function is permanent or progressive. At the same time, it cannot be denied that a certain number of cases which at first are rightly placed in the above catagory, do later on show signs of definite organic kidney disease.

The presence of both albumin and of sugar appreciable quantity is abnormal, and in the young it is of serious import, and if persistent, it is likely to lead on to diabetes. In people past middle life, and especially in those of gouty type, it is of less consequence and usually yields to treatment more or less speedily, to recur, however, in some cases, under conditions similar to those under which it first appeared.

The presence of both alumin and of sugar in the urine indicates serious disturbance in the metabolic processes, calling for relief to the nervous strain which the patient may have been undergoing, and an adjustment as far as can be of his environment, but under favorable conditions these patients may continue in at least fair average health for many years.

New Method of Preserving Milk.

Spolverini and Flamini (Rivista di Clinica Pediatrica) mention a new method of preserving milk, by means of an atmosphere of carbonic- acid gas, under pressue. The milk remains unaltered for several days, both in its physical and chemical characters, and in the biological constituents, the ferments. Some of the germs present are killed, while others have their development arrested. Only one kind remains unchanged, a diplostreptococcus, not pathogenic, which after some days, with a suitable temperature, coagulates the milk. Uncooked milk can be kept for 8 to 12 days at a temperature of 12 to 14 degrees C., while boiled milk is preserved indefinitely. The production of the gas is without difficulty prac-

tically. This method of preservation assists us in solving the question of the feeding of children with milk sterilized by heat, in preference to cooked milk, since it permits us to keep the milk for a considerable period deprived of all pathogenic germ action, and to preserve all its biochemical functions, which are lost my heat sterilization.

A Case of Sudden and Fatal Illness, With Unusual Symptoms.

Evans (The London Medical Lancet) says a patient, a thirteen-year-old girl, who was first seen in a very severe attack of chorea. She had one milder attack the night before which was followed by facial twitchings. The second attack lasted three days and ended suddenly. Four hours later she died. The treatment was a fluid diet with 4 minim doses of Fowler's solution and 5 grain doses of potassium bromide. The only etiologic factor that could be found was that she had been twice frightened quite severely in the two days preceding her illness.

Infantile Paralysis of the Abdominal Muscles; With Report of Case.

Cornell (Johns Hopkins Hospital Bulletin) finds 10 cases similar to his own which was as follows:—A Russian child, twenty-one months old, was admitted August 6, 1904. Two weeks before he had had a fever, during which he was stuporous for three days. Afterwards he could not sit or stand and the right leg and left arm were paralyzed. By August 20th he could walk. On September 15th, abdomial paralysis was noticed. Two months later the child was fat and healthy. The abdomen lost the skin reflex on the right side and the abdominal muscles were flaccid.

Pancreatic Infantilism.

Rentoul (British Medical Journal) describes the case of a patient who was an eighteen-year-old girl whose mother died of tuberculosis. She had a normal brother. She had a profuse oily diarrhea from infancy and became tired easily. She grew slowly until eleven years old, but after that did not grow at all. On examination she seemed as a child of nine years. There was no sexual development. She was put on panereatic extract with the result that in four months she gained nine and a half pounds, increased two inches in height and began to show signs of sexual development.

Enchondroma of the Patella.

Ray and Mackey (The London Medical Lancet) Four months before examination the patient, a boy nine years old, was kicked by a horse on the knee. Since that time there had been a slowly growing lump on the left patella. The knee was moderately distended, partly flexed, and there was a large mass adherent to the left patella at its upper quadrant. On operation, the synovial sac was found adherent, and moderately distended with fluid. A nodular cartilaginous mass three inches in diameter was removed from the patella. Seven months later the knee was, to all appearances, normal.

Traumatic Hydronephrosis and Traumatic Plural Effusion; Aspiration of Both Effusions; Resection of Rib; Recovery.

Collins (The London Medical Lancet) describes the case of a thirteen-year-old boy who was run over by a wagon. When examined there was a great tenderness over the left renal region. The urine contained a little albumin. For three days the temperature was over 100 degrees F. His daily urine output was about a pint. Then his temprature rose two degrees and he had great pain and some resistence over the left thoracic, hypochondriac and lumbar regions. There was a pronounced swelling in the left renal region. After a preliminary tapping the left iliocostal space was aspirated. 8 1-2 ounces of bloody urine being obtained. Some days later 30 ounces of fluid were removed from the left chest and then two inches of the sixth rib were reseeted. The daily urine output increased steadily and the patient had an even convalescence.

A Case of Acute Meningitis Following Epidemic Parotitis. Operation. Recovery.

Lister and Farnley (Australasian Medical Gazette) describes the case of a girl aged five years who had an attack of mumps. After this she fell on the left side of her head; four days later she had a typical case of meningitis. Six days later bulbar symptoms developed. She was trephined over the left parietal bone four inches above the tip of the mastoid. When the dura was incised 3 ounces of clear cerebrospinal fluid ran out. As the patient was in collapse the wound was closed with drainage. Fluid escaped for four days. Improvement was rapid and except for a slight aphasia recovery was complete in a few weeks.

Case of Acute Strychnin Poisoning in a Child; Recovery.

Pooler (British Medical Journal) describes the case of a girl aged eight years was treated for postdiphtheritic paralysis with a mixture containing liquor strychninae hydrochlor. (B. P.), 3 minims three times daily, increased to 5 minims. This treatment was continued for a month and the medicine was about finished when the father thought the child might as well take the remainder in one dose. In about five minutes the child was stricken with convulsions which continued for two hours, at the end of which she was seen by the author. She took between one-third and one-half a grain of strychnin. Emetics and lavage were used with complete recovery.

On the Care of Infants With a Consideration of the Organization of the Station of the Society for the Protction of Infants.

Escherich (Wiener medizinische Wochenscrift) in a lecture delivered before Pediatric Section of the "Gesellschaft fur Innere Medi-

zin und Kinderheilkunde," of Vienna, on the occasion of the Section's visit to the recently opened station of the "Society for Guarding Infatns," explained the deevlopment of the idea of combatting the great infant morality by suitable aid stations or milk kitchens. The French were the first to recognize the seriousness of the problems and to attempt a remedy. They were soon followed by other countries and the results have satisfactorily demonstrated the value of this system. The mortality among the children under the care of these stations in Paris, from 1892 to 1898, was 4.6 per cent., whereas, during the same period, the mortality among infants in general was 17.8 per cent.

He detailed the organization of the milk kitchen "Sauglingsschutz," which does not, however, differ materially from such stations elsewhere. All milk for artificial feeding is sterilized. It is also noteworthy that the principle activity of the society is directed toward increasing the breast-feeding of infants and for this purpose special courses of instruction are given to young midwives and young mothers, and close connection is maintained with the various maternity hospitals of the city, for the purpose of maintaining supervision over infants and mothers after leaving the care of the institutions.

Phthisis and Pregnancy.

Burkhardt (Deut. med. Woch.) describes the details of the histories of a number of cases, and reaches the following conclusions: (1) Pregnancy does not exercise, eo ipso, an unfavorable influence on the coarse of a tuberculosis of the lungs; cases do well at times in high altitudes. (2) Cases of progressive phthisis can become stationary during the course of a pregnancy, and the prognosis is then favorable. (3) Abortion does not benefit the lung condition, on the other hand it might do harm. (4) Artificial abortion must, therefore, be limited as far as possible, and the indications which the author feels inclined to give for it are (a) the severest degree of phthisis, and (b) when hyperemesis gravidarum exists. (5) At the birth emotional excitement and bleeding must be reduced to the lowest measure possible (at times artificial delivery, care for satisfactory involution of the uterus, cloroform); sucking must be forbidden. (6) The treatment of the phthisis in high altitudes must be continued for from four to six months after the delivery, even in mild cases with favorable prognosis, in order to avoid late disturbances.

The Treatment of Eclampsia.

Byers, (London Medical Lancet) says that if the attack cannot be warded off the following is the proper procedure:

Treat the convulsions with morphine used subcutaneously. Keep the patient on her side, purge freely, use saline infusion, allow no liquids. In a word, as Gooch advised long ago, " take care of the convulsions and let the uterus take care of itself."

Make an effort to eliminate the poison by purgation, hot packs, and by saline infusion.

If labor has not set in treat the convulsions, but do not induce premature action of the uterus. If labor has begun and the patient is in the second stage and the os dilated, give chloroform and deliver by forceps if possible, or by turning. If, however, morphine and purgation with saline injections have been tried and the patient is not improving, dilate the cervix and deliver.

For the convulsions after delivery use morphine, purgatives and saline infusion.

In the prophaxis of eclampsia rest, milk diet, warm baths, and purgatives are the best methods.

Considerations Relating to Milk Supply.

Robinson (Scottish Med. and Surg. Journal) takes up hygenic requirements in connection with milk trade which are to be observed from the management of the farm till the milk reaches the consumer, and the list of regulations recommended is very similar to that advised by many writers. The writer is not favorable to the giving of instruction in artificial feeding, though he admits that the practice tends in the right direction. and he is not at all sure that the practice of giving donations of money to mothers who have nursed their own children would prove of much avail in this country. He reserves his unqualified support for any method that would encourage breast feeding, and would only permit artificial feeding in the few necessitous cases where it is impossible. When artificial feeding is to be resorted to the author recommends pasteurisation of cow's milk under present conditions.

The Feeding of Athrophic Infants.

Varot (Gaz. des Hopitaux.) proposes to retain the term infantile atrophy for those infants temporarily arrested in their growth, but exhibiting the possibility of being nourished on sterlized milk. For the marasmic infants, which are practically always incurable, he would reserve the name "athrepsiques." Where the retardation of development and emaciation are prolonged to be a later date than usual, as, for instance, to the third year, the author recommends the designation of "infantile bradytrophy." As regards the probability in any case of success atteding the use of sterilized milk, he has found, he says, the limit of curability of atrophic infants is reached when they weigh less than the half of the normal weight between 3 and 8 months.

Athrophic infants are usually artificially fed. A small number receive an insufficient supply of nourishment. More often they are overfed with milk which is bad in quality and not suitable to their digestive powers. Some are rather over-filled than over-fed, i. e., they receive large quantities of too dilute milk. Vomiting and abdominal distension are often present in both the latter types. He recom-

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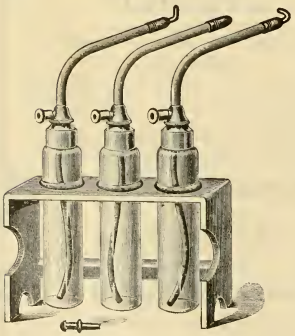

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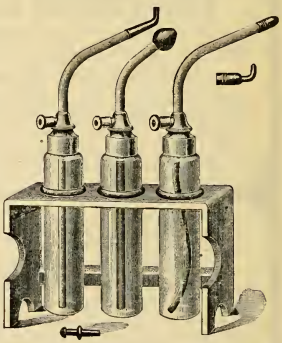

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New Method of Preparation of Raw Cow's Milk for Children.

Concetti (Riv. di Clin. Ped.) describes a new method of preservation of cow's milk, which does away with the necessity of sterilization or pasteurization. The author says that the milk may be kept for some days in the laboratory without any preservative, provided that it is taken from the cow in a fairly aseptic manner. It need not be free from germs, since many of the non-pathogenic germs do not change the condition of the milk, and are harmless. Valgussa has invented an apparatus for taking the milk from the cow so that it is nearly aseptic. Siphons have been prepared in which the milk can be placed, instead of in the ordinary bottles. Carbolic acid gas has been found to be a good preservative; while not killing the bacteria, it inhibits their action and retards their development. This gas is injected into the milk in the siphons just as it is into a seltzer water bottle, and after five days the milk is found to be perfectly sweet. The biting taste of the carbonic acid gas soon passes off, and leaves the milk unchanged in its physical, chemical and physiological properties. The phosphates are rendered more soluble and the casein more digestible. This is an economical method of preservation, because the milk can be kept under pressue of the gas until it is needed for use, and none need be thrown away because the bottle has been opened and the milk exposed to the air. Neither is it necessary to divide the milk into quantities of the proper size for the number of feedings desired and to keep it in separate bottles.

mends the use of sterilized milk, and speaks highly of the "Gouttes de lait," the good results from which, he says, are largely dependent on the efficient administration and sufficient attendance through an ample staff.

The author mentions some observations by M. Saint Albin showing the great variety of the relative degrees of heat radiation met with in different infants, but is unable to draw any useful conclusions. The writer endeavoed to graduate the quantity of milk according to the weight rather than the age of the infant, but found the results unsatisfactory. The author recommends careful trials with each case, and even states that in occasional instances by this means gradual additions he has found overfeeding give benefit where he had previously been unsuccessful.

Ozone in Pulmonary Tuberculosis.

Cotton ((Montreal Medical Journal) recognizes the great value of open air in the treatment of pulmonary tuberculosis, and this must be supplimented by careful attention to the stomach and digestive organs. The food should be highly nutritious, easily digested, and rich in proteids. It should consist chiefly of milk, raw eggs, rare cooked meats, game, fish, oysters, vegetables, and bread, together with lactalbumin. The latter is obtained by treating whey with alcohol. It is the most assimilable of all the proteids and is rapidly absorbed. In addition to the foregoing he employs inhalations of ozone, using camphoric superoxide as a carrier. The latter is to overcome the irritating effects of large quantities of ozone upon the mucous membrane of the respiratorw tract. For producing the ozone he uses an electric generator run by an alternating current of 110 volts. The generator is placed in the patient's bed room, which should be large, well ventilated, and light. After the patient has inhaled the nebulized camphoric superoxide for three minutes the current is turned on, and the generator allowed to run from eight to thirty minutes. The patient rests in this atmosphere from 9 P. M. to 7 A. M., and for four hours during the day, with windows and doors closed. During the intervals the room should be thoroughly ventilated, and the patient should take exercise in the open air. Patients with a febrile temperature should of course not exercise.

The Roentgen Ray in Enlarged Glands of the Neck.

Dovaston in the London Medical Lancet, describes the case of a girl 18 years of age who was seen in 1904. At that time there was a mass of enlarged glands extending from the angle of the jaw on both sides of the neck and meeting at the chin. They were hard, elastic, and movable, and diminished in size from above downward. The individual glands varied in size from a walnut to a hen's egg. The enlarged glands followed an attack of scarlet fever in May, 1900, the right side of the neck being first involved. An operation for their removal was undertaken in 1902. The following year the glands on the left side of the neck became enlarged. Treatment with x-ray was begun on September 26, 1904, and continued until July, 1905. The exposures were given for the first two months four times a week, and afterwards three times a week, and in the last five months twice a week. Under the treatment the glands gradually became discrete, lessened in size, and later disappeared. The contour of the neck was restored, and there has been no recurrence up to the date of the report, February 1, 1906.

Stovaine as a Spinal and Local Anesthetic.

Chiene (British Medical Journal) points out that stovaine has many advantages over cocaine as a local anestetic. It possesses antithermic and antiseptic proprieties, and it is far less toxic than cocaine. There was a marked difference when this substance was injected into the spinal canal. The quantity that may be introduced under the subarachnoid space may vary from 2 to 10 centigrammes. Used in this way the anesthesia begins in the perineal region and then involves the toes and feet. The level to which it arises is due to the amount of the drug injected. Chiene has employed slovaine to produce spinal, anesthesia in fourteen cases, and the results were highly satisfactory.

Peroxide of Zinc in Skin Diseases.

According to Le Nord Medical this substance has been extensively employed in the treatment of syphilitic and tuberculous ulcers and fistulas. Ektogan may be employed, powder form or incorporated with a base to form an ointment. It is an active disinfectant which disengages free oxygen in a nascent condition, and is especially useful in ulcers, where there is an underlying constitutional state such as alcoholism and diabetes, and in which there is a tendency to gangrene. In burns a pomade containing 10 per cent. is a bland application which will prevent adhension of the dressings. Boils should be treated with ointment containing 20 per cent. Ektogan has a purely local action.

A Peculiar Cutaneous Pigmentation.

Weber (British Journal of Children's Diseases) reports a curious case of pigmentation which developed in a girl 15 years old. The author says that it was probably an incomplete form of Recklinghausen's disease presenting the peculiar pigmentation but without the superficial tumors found in that disorder. The pigmentation affected the trunk and neck chiefly, the extremities to a less degree, and the face was quite free. There were no areas of leukoderma. There were diffuse brownish patches over the upper part of the back and neck which were sharply defined and probably stationary. The upper border was well defined, but below it merged gradually into the ordinary skin. There were brown spots in small patches plentifully scattered

over the trunk, the paler ones having been most recently developed. There was a group of very dark, almost black, spots on the left side of the thorax resembling a group of pigmented nevi, but not raised above the level of the skin. These blackish spots were first noticed about three years ago. The earliest pigmentation noticed by the mother was at the back of the neck when the child was about 18 months old. Since that time the pigmentation has gradually developed. The patient's general health was good, and the examination of the various organs was negative. The general intelligence and mental development were up to the average. The patient has been subject to headache and bilious vomiting, but there has been no faintness such as would suggest Addison's disease. The mother suffers from small patches of xanthelasma palpebarum, which appeared some years ago. Other than this there have been no anomalous cases of pigmentation in the family. The pigmentation occurs chiefly in the covered parts of the body, and there is no special liability to freckle from exposure to the sun. This is the reverse of what occurs in Kaposi's xeroderma pigmentosa.

Sciatica of Abdominal Origin.

Forbes Ross (The London Medical Journal) calls attention to two cases of sciatica which had their origin in the abdominal cavity. The first patient was 43 years of age, married, a multipara, who consulted him 1 year before for menorrhagia. She had suffered for the past six or seven years with constant pain in the tenth dorsal area accompanied by attacks of sciatica, which had been attributed to gouty neuritis. A small papilloma was removed from the cervix, and three weeks later a small, tense, cystic tumor of the size of a small orange was removed from the left ovary. The operation was followed by a prompt cessation of the sciatica, as well as the pain at the tenth dorsal segment. The explanation of the pain is that there was irritation of one dorsal segment transmitted to another by the extreme pressue of the distending cyst on the nerve endings in the ovary. Another case is mentioned in which there was persistent and intense pain down both legs with cramps in the calves. This patient had a tumor of the cervix low in the pelvis, which caused great discomfort and pressue upon all of the pelvic organs. The cases illustrate the importance of a thorough pelvic examination in all cases of sciatica.

Enterospasm and its Mimicry of Appendicitis.

Hawkins (British Medical Journal) says that the appendix is sometimes excised unnecessarily, and that certain patients subjected to this operation suffer quite as much after it is performed as before. This is due to the fact that tenderness and pain in the right iliac fossa is thought to point to inflammation of the appendix. If a certain class of these patients are studied the conclusion is almost certain that their troubles are functional rather than structural. That this is not recognized is due to a neglect to discuss the functional disturbances of the intestine. The functional disorders of the stomach have long had marked attention paid to them, but the intestine is regarded as a hardy tube uninfluenced by defective states of other organs.

He mentions four cases. From these the writer draws the conclusion that it is not uncommon for men and women in early adult life to suffer from abdominal pain which from its long duration and the absence of evidence of organic involvement is probably due to functional disturbance of the intestine. Such patients are often neurotic or neurasthenic, and the abdominal troubles vary directly with the mental state. The pain in these cases occur in short, sharp attacks, or may last for months as an ache or discomfort. The pain is usually in the right of left iliac fossa or in the immediate neighborhood.

Tissue Metabolism in Phthisis.

Parkinson (The London Practitioner) comes to the conclusion that the respiratory capacity is diminished below the normal in phthisis. The relative respiratory capacity per centimeter of stature is also diminished. The amount of carbon dioxide exhaled is increased above the normal, as is also the consumption of oxygen. The total purin nitrogen excreted is increased above the average normal amount; in a word, the tissue metabolism is increased. The presence of albumose in the urine is not indicative of a febrile condition,

XXXVII

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but simply shows the presence of an infective condition in the body. If it is absent in a particular case, it is probable that there is no breaking down of the lung tissue, and this indicates a more favorable prognosis. The phthisical chest is deeper proportionately to the width and is longer in proportion to the width than a normal chest. It is probable that this shape of the chest indicates a predisposition to phthisis, as it shows an arrest of the normal development.

Food Fever in Children.

Smith (British Medical Journal) describes a class of cases in which the fever comes on suddenly, with more or less pronounced digestive disturbances, and lasts in its acute form for several days, or it may linger in a modified degree for some weeks. The attacks may occur quite frequently, and if so they will markedly interfere with nutrition. The subjects of this complaint are usually neurotic children from 3 to 12 years of age. The attacks begins with headache, accompanied sometimes by vomiting, sometimes by looseness of the bowels, but always by some kind of digestive disturbance. The temperature varies from 101 to 105 degrees; as a rule the stomach resonance is higher than normal, and the liver can be felt one or two fiinger-breadths below the costal margin. The urine is highly colored, thick, and very acid. If the case is left alone the temperature remains for some days continuously higher than the normal level. It generally rises a little after food, and is almost always 102 degrees or more in the evening. At the end of a few days is subsides, either suddenly after a profuse sweat or gradually, but is often moderately raised for a week or even longer. If when the fever begins the child is given calomel or blue pill the temperature as a rule falls directly the medicine has acted, but instead of remaining low is rises again in a few hours, and in the evening generally reahes 100 degrees or a little higher. For several days the temperature at some time during the twenty-four hours will be above normal. As a rule there is no bodily discomfort, but the patients are fretful and irritable during the day and sleep badly at night.

It is probable that these cases are due to an autointoxication. The stools show fermentation, and the results of treatment are such as to suggest that this is the probable explanation. To prevent and cut short the attacks special attention should be devoted to eliminating foods which cause fermentation. Starches and sweets must be given with cautino, and the ordinary combination of starches and milk forming the usual puddings of the nursery should be strictly forbidden. Milk itself, except in limited quantities, is harmful, and a milk diet which consists of milk in conjunction with various kinds of farinaceous foods is actively injurious. The proper diet should be mutton, poultry, white fish well boiled, green vegetables, and eggs. Plenty of butter should be given, with stale bread, toast, and rusks. The salted foods are good, and patients who are old enough can take ham and tongue, bloaters, and sardines. These things, which are usually unknown in the nursery, are quite harmless and make good substitutes for marmalade and jam. Cases treated in this way quickly have a return of normal temperature, but the dieting must be strict.

Fatal Rupture of a Pyosalpinx During Labor.

Rob in the London Medical Lancet describes the case of a vigorous woman who had been in labor for some time before coming under observation. At the time she was seen the head was at the brim of the pelvis and the os fully dialated. The pains being feeble, choroform was administered and forceps applied, the delivery being accomplished with only a slight tear of the perineum, which was sewn up. Thirty-six hours after the labor there were no untoward symptoms. The abdomen was not rigid nor distended, and the uterus could be easily felt. The temperature was 106 degrees and the pulse 96. About forty-eight hours after labor there was some colicky pain in the abdomen, but no tenderness. The temperature was then 99.6 degrees and the pulse 96. Five hours later the temperature was 100 degrees and and the pulse 100. The following morning she was much worse, vomiting repeatedly, and complained of intense abdominal pain. The temprature at this time was 98 degrees and he pulse 140. The abdomen was not rigid or distended. There was a slight tenderness on the left side of the uterus. Two hours later the patient expired.

A post-mortem examination revealed an ounce of blood-stained serum in the pericardium and in each pleural cavity. The lungs, heart, brain, spleen, liver, and kidneys were healthy. The small intestines were hyperemic in places. About the left ovary and in Douglas's pouch and in the lesser sac of the peritoneum was some flaky lymph. There were several old adhensions around the left ovary and Fallopian tube, both of which were deeply congested. A drop of thick yellow pus escaped from the left Fallopian tube, which contained about half a drahm of the same material. The interior of the uterus was quite healthy. There was no history of salpingo-oophoritis.

Foreign Bodies in the Uterus.

Heller in The London Practitioner describes a case of a woman from whose uterus a hairpin was removed. He takes occasion to discuss generally foreign bodies in the uterus, which are classified according to the reason for introduction. About half the total number were probably or certainly introduced to procure abortion. The next number are those inserted for therapeutic purposes, such as leeches, tents, and pessaries. Vaginal pessaries show singular capacity for migrating

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into the uterus. Attempts to prevent conception, self-abuse, and the vagaries of the insane and hysterical account for the remainer.

One of the most striking cases of migration of a foreign body from the vagina to the uterus is reported by Czarnecki. A girl 12 years of age at the onset of menstruation, alarmed by the flow of blood, introduced a tin box into the vagina. It was 10 centimeters in length, 4 centimeters in diameter and oval in outline. After this menstruation was regular, and she subsequently could feel the box in the vagina. There were practically no symptoms, and she never sought advice or told any one about it. She married at 25, and her husband is said to have not found anything amiss. Five months after marriage she became pregnant, but aborted at four months, not having medical attendance. After the abortion the foreign body was no longer felt in the vagina. A second pregnancy went to term. When labor began the foreign body was found lying between the head of the fetus and the os. The tin box was first crushed and then removed, delivery being completed without much difficulty, the child and mother doing well.

Lead Poisoning from Electrolysis of Water Pipes.

Roberts (British Medical Journal) says that a well studied case shows the possibility of electrolysis in dissolving lead from a water pipe and allowing it to be taken up by the water. An analysis of the water showed 0.14 grain of lead to the gallon. The water-supply was from a pure source, and in other situations when conducted through lead pipes was not contaminated. The lead water main was within a few inches of a cable of an electric light service, the return being an uncovered strip of copper. A leakage of 1.8 volts was discovered, and on testing the water pipe it was found to carry a current of one-tenth volt. Attention is called to the common practice of grounding telephone wires and electric bell installations by attaching them to the water pipes of houses. The demonstration in the particular instance reported that lead poisoning was due to the electrolysis of the water pipe is conclusive. In cases of obscure lead poisoning this point would be worthy of investigation.

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Removal of the Gall-Bladder.

Mayo according to the British Medical Journal says that there is an undoubted relationship between cholelithiasis and cancer of the gall-bladder and duets; and as gall-stones produce charasteristic symptoms, and are therefore, as a rule, easily diagnosed, and since they can be removed in the early stages before serious complications have supervened with very little risk, the preventive treatment for cancer of the gall-bladder is obviously removal of the source of irritation. So impressed is the writer with the importance of this view, that although he knows the symptoms of gall-stones, which frequently depend on the associated catarrh, can often be relieved for a time by general treatment, but the author considers it wise to recommend their early removal, not only because it can be safely done, but also because the symptoms are likely to recur and lead to other complications, and, not least important, because, in a considerable percentage of such cases, malignant disease will be likely to supervene of the irritation be not removed.

Pneumonia, Prognosis and Treatment of.

Cattle, according to the London Medical Journal, holds that the increased fatality of pneumonia of late years is partly due to the increased prevalence of influenza. Under two years the mortality is 50 per cent. From then to twenty years it is low, but after that it increases with each decade of life. The greatest incidence is between the third and fourth decades. There is an increasing tendency to secondary empyema. Preexisting cardiac disease and concomitant pericarditis are very serious complications. Pregnancy also increases the danger. Sudden cessation of a profuse expectoration, with no improvement in the general condition, is a very bad sign; also the expectoration of prune-juice sputum or pure blood.

Serum treatment of the disease has as yet won no firm place. The bowels should be well opened by brisk purge at the beginning; later, purgation may be dangerous. The food should be milk, well diluted with soda water, or barley water. The pain in the side calls for relief, but opium should not be given until hot applications have been tried. For the delirum, hyoscine may be given. The application of ice-bags to the affected area often produces considerable benefit. The routine administration of alcohol is not necessary or edvisable. Late in the disease strychnine should be given hypodermically, and also belladonna to stimulate the respiratory center and to dry up the bronchial secretions. Oxygen should always be in readiness. The abstraction of blood in suitable cases is worthy of trial.

Nurslings, the Passage of Antibodies Into the Blood of.

La Torre (British Medical Journal) says that there is general agreement as to the elimination of antibodies by the milk. The only questions are whether they find their way in any useful quantities into the blood of nurslings, and, if so, whether this happens constantly, or only in the case of very young infants. The author criticizes Salge's experiments in elucidation of these points as being too few in number, and of purely scientific rather than of clinical interest. Observations were made on 17 healthy children of ages from one month to two years. To begin with, 22 children were available, but five of these began to suffer from gastro-intestinal disturbances, and were left out of account. In five cases, 3000 units of Behring's serum were injected into the wet nurse. In each of the other 12 cases, 6000 units were employed. This quantity of serum was administered in three injections at intervals of three days. The antitoxic power of the nursling's sarum was tested the day before the first injection, and again three days after the last injection. In the first series of ten experiments, from 1-12 to 1-60 cubic centimeter of the child's serum was withdrawn and mixed with from one to ten times the minimal lethal dose of diphtheria toxin and injected hypodermically into a guinea-pig. The object of these experiments was to determine whether any useful degree of antitoxic power could be conferred on the blood of nurslings by means of milk. In the second series of seven experiments a smaller dose of toxine was used—from 1-10 to 8-10 of the minimal lethal dose—and an attempt was made to find in the time of onset of oedema and other symptoms, a means of measuring the antitoxic power conferred on the child's serum. The author found that the passage of antibodies was on a very small scale. He could only rarely satisfy himself that as much as 1-1000 part of the antitoxin injected into the wet nurse was present in the blood of the child. He therefore entertains no hope that the child can be advantageously immunized by injecting the wet nurse. The proceedings were found not to be uniformerly harmless to the persons injected. Forty per cent. of the women suffer from one or other of the symptoms mentioned, namely, articular and muscular pains, fever, vomiting, headache, ecchymoses, pruritus, and albuminuria (one case). The passage of antitoxin into the child's serum was not found to depend in any way on the age of the child.

Scarlet Fever, Complications of.

Hunter (British Medical Journal) describes scarlet fever as a fever characterized by sore throat, more or less adenitis, a specific rash, a specific desquamation, and a specific course lasting usually for six weeks. The mode of onset is usually with a sore throat, headache, and vomiting, these occurring in about 85 per cent. of the cases. Sore throat is the commonest of these symptoms, headache the next. In addition to these specific symptoms, some cases present rigors and diarrhoea, a few have pain in the limbs, and a few present epistaxis.

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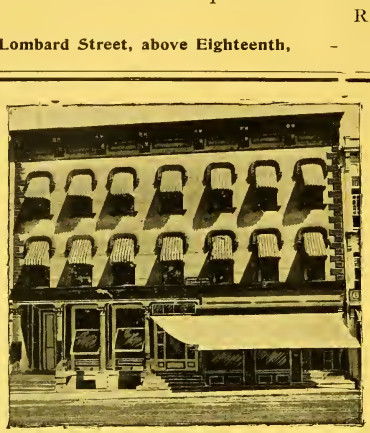

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The complications are as follows: Adenitis, 19 per cent.; albuminuria, 21 per cent., and actual nephritis, 2.8 per cent.; otorrhoea and otitis, 6.4 per cent.; rhinitis and rhinorrhoea, 6.4 per cent.; rheumatism, 4.3 per cent., and secondary tonsillitis, 3.5 per cent. Mastoiditis, meningitis, optic neuritis, and ocular palsies also occur.

The degree of the rash has some little influence on the height of the initial fever, and slightly more on the duration of the pyrexia, but it is not related to the subsequent severity of the case. A case with a severe rash may pursue a mild course, and vice versa. On the whole, however, a severe rash is more likely to be followed by complications than a mild one. There is some relation between the severity of the initial angina and the tendency to the occurrence of secondary adenitis, but this is not so close or so general as to account for the occurrence of the secondary adenitis. There is no actual definite relation between the height of the temperature and the occurrence of complications.

He has studied the relation of oral sepsis and scarlet fever, and he concludes that the severity of the disease, that is, of the septic complications of it, is greatly influenced by the degree of oral sepsis in the patient before admission. This is not suprising, considering that the actual lesion in scarlet fever is in the throat, and the simple addition to this of a staphylococcal infection may be a very serious matter. Of cases without oral sepsis, only 35 per cent. had complications of moderate or severe degree; whereas of cases with oral sepsis, 65 per cent. showed such complications. The physician's first duty, therefore, is to eliminate this factor, if it be present, just as he would remove any other possible source of trouble. It is no less important in typhoid fever, in which disease the septic factor is an important cause of the chief intestinal complications, perforation, and hemorrhage.

Tuberculosis and Alcohol.

Wolff (British Medical Journal) divides his subject into two parts, and considers first to what extent alcohol, as used at the present

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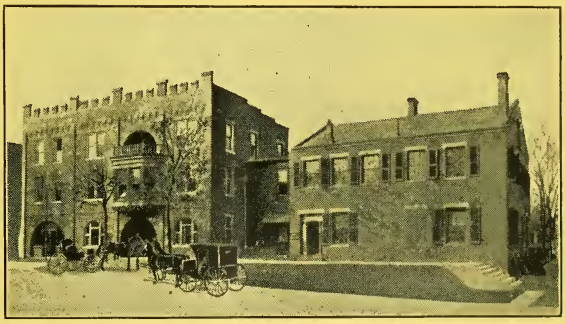

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day, is a cause of phthisis, and second, whether the consumption of alcohol by phthisical patients should be absolutely forbidden, or may be allowed in certain quantities. Reliable statistics as to the effect of alcohol on the causation of phthisis are few in number. There is an impression that tuberculosis prevails amongst people in proportion to the amount of alcohol consumed amongst them, but careful investigation does not altogether support this view. Thus in England there has been a drop in the prevalence of phthisis since 1872, when sanitary regulations began to receive attention, yet the consumption of alcohol has increased during the same period. Other similiar instances are quoted. Another fact which goes to prove that alcohol is not important as a direct cause of phthisis is, that the proportion of the number of women attacked by phthisis to the number of men is far greater than is the proportion between the number of women and the number of men who are addicted to the excessive use of alcohol. The enormous spread of tuberculosis in its milder form amongst children who can never have taken alcohol must also be considered. He concludes that alcohol does not to any extent directly cause the spread of tuberculosis infection. A second question is how for alcohol results in the development of phthisis after infection has occurred. Certain experiments on animals and the comparative rarity with which recent tuberculous lesions are found in post-mortem examinations of alcohol subjects suggest that the importance of alcohol in this respect also has been overrated. Clinical observation is of great value in deciding the matter, and the author has investigated it in connection with 767 sanatorium patients. Of these patients 39 out of 322 men belonging to the better class, 2 out of 246 women, and 13 out of 199 men of the working class had been addicted to the excessive use of alcohol. The answers to questions on the subject given by the men of the working class were not held to be trustworthy, and the small proportion of 13 to 199 is thus accounted for. The doctors agreed that the causes leading to the development of phthisis were in most cases many, and a single cause could only seldom be adduced. For example, 72 of the 322 men had been great smokers, 19 had a hereditary disposition to phthisis, etc. He says that in only about 2.4 per cent. of the cases could alcohol be considered with any great degree of probability to be the cause of the outbreak of the disease. Indirectly, however, the importance of alcohol in predisposing to tuberculosis cannot be exaggerated.

He concludes that tuberculosis does not belong to those illnesses in which the use of alcohol is to be in all cases forbidden. Its use, however, should be narrowerly limited, or even forbidden, (a) for nervous and excitable consumptives, and (b) for patients with a tendency to hemorrhage, especially where there has been previous excess. The alcohol treatment introduced by Brehmer and Dettweiler, and which is now altogether abandoned, deserves consideration, the more because unprejudiced pathological researches seem to show that alcohol may possibly exert a directly beneficial influence on the healing of tuberculous processes. Since the harmlessness of alcohol in moderate doses has been proved, its use in the symptomatic treatment of phthisis is justifiable, and in some cases to be recommended. Alcohol, on account of its fat-sparing properties, and the fact that it is readily taken by patients who are feverish and have no appetite, should probably be given more frequently in such cases than at the present day is customary. With the necessary limitations alcohol should not be forbidden to phthisical patients as a means of enjoyment; its effect upon the spirits of the patient is of no small value, and those patients to whom it is unnecessarily forbidden tend to become hypochondriacal. On practical and humane grounds temperance rather than total abstinence should be earnestly taught in the sanatoriums for the poorer classes.

The Treatment of Strychnine Poisoning and Tetanus With Spinal Anaethesia.

Russell in the London Medical Lancet has introduced a new form of treatment for tetanus, which will be heartily welcomed by all who have the misfortune to have to deal with an instance of it. The author quotes a case of Dr. Murphy's which shewed the value of the method. It was that of a boy of nine, who recovered from what was appearently a severe attack of the disease. He recommends that spinal anaesthesia be induced by eucaine, and some antitetanis serum be injected into the spinal theca at the same time. The injection must be made with a stout needle into the lumbar region under chloroform anaesthesia, which is necessary on account of the contraction of the muscles of the back. It is recommended that 1-22 grain B-eucaine with 1-100 grain morphine sulphate be injected through a lumbar puncture. The patient has a few hours' quiet sleep after the injection, which may have to be repeated, even daily, several times, and can take nourishment. Even if the patient is not cured, the treatment robs the disease of almost all its horrors by stopping the sufferings, an end much to be desired by those who attend this dreadful illness. If the salts are injected with some antitetanic serum, as was successfully done by Messrs. Wallace and Sargent, there seems more hope of a successful result than with any other method of treatment yet practiced.

Treatment of False Joints and Delayed Union After Fracture.

Luper, (Corresponzblatt fur Schweizer Aerzt) states that early in 1905 Professor Bier published a paper on this subject in which he reported ten cases, in nine of which he quickly obtained union by his method. He pointed out that feeble union, and perhaps a false joint,

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was more likely to take place when the blood-supply was deficient than when a large haematoma was present. To remedy this deficiency of blood he injected some defibrinated blood between the fragments. The idea was that he suppplied the wanted nourishment. The author records two more cases in which he personally used this method with success, but he offers an alternative and better explanation, that the injection sets up inflammation of the seat of fracture, which leads to callus formation and union. The first of his cases was that of a woman who had fractures of both bones of both legs. That of the right leg was compound, and united in six weeks; that of the left was accompanied by a minimum outpouring of blood, and refused to unite after four months of various treatment. He says that he could see nothing but operation, with wiring of the bones, except a trial of the treatment advocated by Professor Bier. He injected 35 centimetres, 35 centimetres, and 40 centimetres of defibrinated blood at intervals of a week. Perfect union resulted. The leg was treated by rest in plaster of Paris as well. The second case was that of a man of forty-four, who had an ununited fracture of the leg. He was treated at the same time and in the same manner as above. Union took place later than in the first case. He suggests that this may have been due to the fact that, as the man's blood was used for all the injections, in the woman it was a foreign matter, and set up more inflammation, so leading to early union; whilst in the man, as it was his own blood, it led to less inflammation, and therefore slower union. Whatsoever was the cause, Professor Bier and Dr. Lauper have given us a method of treating these difficult cases before it is necessary to proceed to operation. The writer points out that in such cases as those of fracture or refracture of the patella, it is necessary to operate in order to bring the fragments into apposition, without which there can never be union. But another thought strikes one—namely, if the injection merely acts as a source of irritation and callus formation, as seems most probable, is it necessary to use a fluid like blood, which must be defibrinated? Why not use some fluid like normal saline, or a weak solution of some other salt like chloride of calcium? Such solutions can be more easily obtained, and have the great advantage that they can be rendered perfectly sterile by boiling. A blood solution, even when defibrinated, cannot be sterilized in so certain a matter. This is a very important point, as in perfect asepsis lies the whole justification for any line of treatment. There can be no doubt that the treatment of false joints and ununited fractures by means of injections between the fragments will be much used in the future.

Influence of Pus in the Urethra on Gynaecological and Obsteric Cases.

Campbell (British Medical Journal) says that pus in the female urethra is frequently responsible for unsatisfactory recoveries after gynaecological operations or labour cases. According to statistics, over 25 per cent. of gynaecological patients have infected urethras, and a somewhat smaller percentage of parturient women are similarly infected. The bacilli most usually found in order of frequency are: staphylococci, steptococci, and gonococci. In a labour case, if pus is found in the urethra, the external genitals should be washed with a 1 in 2,000 bichloride solution, the urethra should also be emptied of pus. After labour a douche should be given.

The Repair of Chronic Complete Rupture of the Female Perinaeum.

Edge (Birmingham Medical Review) mentions the following points:

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The Use of Antidiphtheritic Serum in the Treatment of Stomatitis and Vulvo-Vaginitis in Children.

Giorelli and Brinda (Archives de Medecine des Enfants) have obtained excellent results in the treatment of aphthous and ulcerative stomatitis in children from the use of antidiphtheritic serum. From one to six injections were given in each case. They first adopted this method of treatment in the case of a child, aged four years, who suffered from extensive ulcerative stomatitis which refused to heal under the application of the usual remedies. Six injections of antidiphtheritic serum were given, and the ulceration rapidly healed. Bacteriologically, streptococci and the

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pneumobacillus of Friedlander were found.

Encouraged by these results, they applied antidiphtheritic serum to the teratment of vulvo-vaginitis in children, using from one to five injections in each case. They treated nine cases in this way. In six no bacteriological examination was made, and the writers consider that the vulvo-vaginitis was simple in nature, and not due to the gonococcus, whilst in three cases the gonococcus was demonstrated in the vaginal discharge. In all these cases the use of the serum was followed by rapid recovery.

They do not consider the serum to have any specific action in these cases, but they believe it probably acts by exciting the reparative activities and reserves of the organism.

Diagnosis of Acute Pneumonia in Infants.

Variot (Gaz. des Hopitaux) describes the symptoms usually met with, especially in central pneumonias. Fits of coughing at long intervals, variations in temperature, loss of appetite and weakness, are sometimes the only symptoms found during the first four days. A crisis occurs in five days, but this is often followered by a teporary rise of temperature which is difficult to explain. In central pneumonia the symptoms are often very late in appearing, and the author quotes a case in which the physicial signs were not apparent until the fifteenth day. Rigors are usually absent, pain is frequently abdominal in position, and dysponea and accelerated breath ing are often absent at first. Cough is slight in early cases and the expectoration is generally swallowed. Sputum can be obtained for examination by exciting cought by depressing the back of the tongue, and removing the mucus brought up by a pledget of cotton-wool on a probe. The presence of the pneumococcus points to a favorable prognosis. The symptoms of central pneumonia may simulate those of typhoid or meningitis, and often a diagnosis is only possible when the crisis has occurred. Cerebral symptoms are often very severe. Investigations were made as to the diagnostic possibilities of radioscopic examination of the chest. A central pneumonia, which may give no physician signs on ausculation or percussion, is readily diagnosed by the shadow thrown upon the screen.

Chronic Inflammation of the Lungs and Heart Disease.

Rothchild (Berlin. Klin. Woch.) holds that congestion of the lung appears to act the same as Bier's passive hyperaemia in presenting the development of secondary tuberculosis. Mitral stenosis may occur where phthisis is already established, and then the conditions are favorable to the lesion healing. Kryger found only 10 cases out of 1,100 autopsies on tuberculosis subjects with heart disease, but found 59 cases of healing tubercle in cases of heart lesion. In other puilmonary affections cardiac disease appears to adversely affect them. Rothchild has in 5 cases observed a chronic fibrous process from primary inflammation of the connective tissues affecting the myocardium or pericardium, the pleura and lower lobes of the lungs. The disturbance is generally pleurisy on the right side, followed by induration of the lower lobes of the lung, its spread to the pericardium is shown by its rhythm. In spite of attacks of pericarditis, pleurisy, or slight haemorrhages, examination of the sputa proved absence of tuberculosis.

Care and Training of Delicate and Nervous Children.

Warner (London Hosp. Gaz.) insists on the value of appropriate clothing and diet. The latter should be as full as the child can digest, containing much animal food. Fat foods aid the increase of weight. If the child is long in getting to sleep, or wakes early, food should be supplied at the bedside. Long, early, and regular hours of rest in a well-ventilated and darkened room are appropriate for poor sleepers and early wakers. For purely neurotic children, country life and boarding-school are sometimes most appropriate. In recommending early training for children as a physiological means of brain culture, he insists on the avoidance of fatigue. Fatigue is early shown by the fact that the face begins to lose its expression, and becomes somewhat pale. The tired child does not balance the head erect or the hand straight, and irregular movements may occur. It is, however, a great mistake to leave delicate children untrained and uneducated. Such neglect often leads to disasterous results in hysteria, chronic weakness, inability to bear headaches without nerve prostration, and other miseries. The hopeful signs of mental aptitude and capacity for education are: (1) Spontaneity in movement and action; (2) control through the senses, leading to imitation of the teacher and co-ordinated action; (3) receptivity and retentiveness of impressions produced on the brain (memory); (4) response in action, and later in the use of words, the meaning of which has been gained by experience, showing intelligent mental action under guidance.

Tuberculosis of the Bronchial Glands in Children.

Thompson (London Hos. Gaz.) calls attention to the great importance of tubreulous disease of the bronchial glands. Of fifty cases of fatal general tuberculosis, 78 per cent. showed the oldest lesion to be in the bronchial glands, while in not a single case were the cervical glands the cause of the fatal result. The early diagnosis of this condition is accordingly a matter of the utmost importance. The child wastes, becomes easily tired and languid, and there is an evening rise of temperature. The enlarging glands may press upon the bloodvessels, the nerves, and the air-passages. In doing so they may cause a fixed pain behind the first bone of the sternum. From pressue on the veins we may have lividity of the skin of the head and neck, with venous enlarge-

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ment over the front of the chest. Pressue on the nerves causes paroxysmal cough. If the trachea or large bronchi are pressed on, we get dyspnoeic attacks coming on. The physical signs are dulness behind the manubrium sterni, marked tracheal breathing over the sternum conducted to the surface by the enlarged glands, and a continuous venous hum produced by pressue on the large veins. An X-ray photograph is also of value in diagnosis. The prognosis is favorable of the condition is diagnosed early. As regards treatment, change of climate should be obtained at once whenever possible. The diet should be rich fats and proteids. Cod-liver oil and iodide of iron may be tried. Iodine may be painted over the manubrium, and mercurial inunctions made into the exillae at bedtime.

Gummatous Synovitis in a Child Simulating Rheumatoid Arthritis.

Findlay and Riddell (Glasgow Medical Journal) give particulars of a child aged nine years with definite congenital syphilitic history. She had Hutchinsonian teeth, interstititial keratitis, bossing, and marked deafness. Both knee-joints were swollen, the left more so than the right. On the left side part of

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the thickening seemed to be bony, but part was synovial. Slight creaking was detected when the knees were flexed. Both elbow-joints also were considerably swollen, as were also the wrist-joints while movement of the latter was much restricted. The matacarpophalangeal joints of the thumb and index-finger of the right hand were distinctly thickened, while the swollen joint in the thumb conveys a vague feeling of fluctuation. There was some enlargement of the cervical glands, and the spleen slightly enlarged. She had been treated by means of syr. ferri. iod. without much benefit. She was then put under treatment by means of the high-frequency current for half an hour three times a week. The swelling became greatly alleviated. The case was at first thought to be one of rheumatoid arthritis, but skiagrams showed that there were no changes in the bones or cartilages. We have here, therefore, an example of unusually widespread symmetrical synovitis of syphilitic origin, accompanied by effusion. It is interesting to note the improvement resulting from the use of the high-frequency current, combined with the internal administration of mercury and the comparative inefficiency of potassum iodide.

The Therapeutic Value of Lumbar Puncture in Children.

Tobler (Corres.-Blatt fur Schweizer Aertze) has had a wide experience of lumber puncture, and it may be said at once that the results of that experience do not materially differ from those of other workers in the same field; that is, the results are disappointing, though in a few cases the procedure has appeared to benefit the patients. In estimating the value of therapeutic procedures in cases of meningitis, it is essential to remember the clinical course of the disease with which we have to deal, and its pathological histology. With these preliminary essentials kept in mind, it is obvious that the best that can be hoped for in tuberculous and suppurative meningitis is a temporary relief of some of the symptoms arising from excessive secretion and retention of the cerebro-spinal fluid. He declares that in his experience even temporary amelioration is rare in these conditions, and his experience coincides with that of the majority. On the other hand, cerebro-spinal meningitis due to the diplococcus intra-cellularis is a disease which is by no means invariably fatal; indeed, it is possible to go further and assert that, at least in its sporadic form, its natural tendency is to recovery, and that a large number of the fatalities are due rather to the sequel of the inflammation than to the infectious agent directly. If, therefore, lumbar puncture is likely to be valuable as a therapeutic measure in any case, we should expect to find it so in these; but it is precisely here that we must remember the natural course of the disease, and be cautious when we are inclined to attribute recovery to our therapeutic procedure. Those who have previously written on the subject are not unanimous, probably from the varying weight they have given to the foregoing considerations. He has practiced lumbar puncture fourteen times in seven cases of the disease, and believes that the procedure was beneficial in three of his cases.

Infant and Juvenile Tabes.

Hirtz and Lemaire (Presse Med., Paris) says that the existence of true tabes dorsalis in children has been doubted by many authorities, and nearly all have agreed as to its extreme rarity. They record forty-seven cases in which they consider the diagnosis of infantile tabes to be beyond question, thus differing from Ormerod, who says that if we exclude cases of Friedrich's hereditary ataxia, the disease is practically unknown. They maintain, on the other hand, that it is almost impossible to avoid the diagnosis of tabes when we have a symptom complex of urinary incontinence, loss of knee-jerks, visceral crises, lightning pains, and disturbances of sensation. The authors say that pupillary troubles, loss of tendon reflex and lymphocytosis of the cerebro-spinal fluid are equally characteristic of nervous syphilis as of tabes.

The most constant functional disturbance of the pre-ataxic period of juvenile tabes is incontinence of urine. It occurs in about half the cases, and is very much more frequent than in the adult. Lightning pains, on the other hand, are a frequent mode of incidence in adult, whereas they are relatively rare in the child. In 14 per cent. of the cases, amblyopia was the symptom for which the child was first brought under observation.

Inco-ordinotion is always slight, and has generally to be sought for, whilst, on the other hand, the loss of the patellar and Achilles tendon reflexes is so well marked that the authors refuse to recognize a case as tabes in which these reflexes are present. Derangement of the objective sensations, such as anesthesia and peresthesia, are the most important functional symptoms of juvinile tabes. The syphilitic origin of the disease is insisted upon, with the obvious qualification that the syphilis is inherited in such cases. One of the cases quoted bears this out in a remarkable degree. The subject of undoubted congenital syphilis, he was attacked with gastric crises at the age of six years old, when he exhibited, in addition to the gastric crises, the Argyll-Robertson pupil, loss of knee-jerks, and a spontaneous fracture of the os calcis. The disease progresses exceeding slowly in young subjects.

They conclude by pointing out that tabes is an uncommon manifestation of hereditary syphilis, the usual one being a diffuse inflammation of the cord and membranes, and that the spinal cord of the child seems to offer a special resistence to degeneration of the posterior columns.

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The Infectivity and Management of Scarlet Fever.

Pugh in the London Medical Journal says that while the throat has been considered to play an important part in the retention of infection, it is probably only rarely the source in the late stages; on the other hand, numerous observations have practically confirmed the frequency with which abnormal conditions of the nasal passages are associated with signs of retained infection. Othorrhea undoubtedly constitutes a danger of much less import than rhinorrhea, but the part played by this complication cannot be definitely gauged on account of its occurrence in association with this latter condition.

As regards desquamation, the opinion is growing that the infectious agent is not present in the shed cuticle. Apart from the foregoing, it must be recognized that return cases may arise from cases in which no morbid condition has been detected, and further, that a morbid condition has been detected, and further, that a morbid condition may develop for the first time, or recur, after the patient has been sent home. Under these circumstances freedom from infection cannot be definitely ascertained, and it is evident that precautions should be continued after isolation is discontinued.

Chapin states that no one can doubt that such articles as cups, handkerchiefs, pillows, sheets, blankets, sofa cushions, towels, toys, and the like, liable to come in contact with the mouth or the nose of other persons may transmit the disease if smeared with infective secretions. On the other hand, secretion deposited elsewhere, generally speaking, can not come into action until dry and pulverized, and when due allowance is made for the influence of light, dessication, and starvation upon the virulence and vitality of all pathogenic organisms it must certainly be seldom that germs in the form of dust are received in sufficiently potent dose to cause the disease.

The writer mentions statistics showing that in cases treated at home subsequent cases occurred in 19.6 per cent. of the unprotected persons in those households, and in another instance in 26.1 per cent. Where the unprotected persons were sent away from home 5 per cent. contracted the disease and a further 1.8 per cent. on retrning home. With hospital segregation the corresponding figures are 12.12 per cent, return cases.

To avoid the occurrence of return cases hospitals for true isolation have been recommended, each ward being a single-bedded cubicle. There are drawbacks in the management of such hospitals, but, as stated, these are not insurmountable.

Heroin and Heroinomania.

Paul Sollier (La Presse Medicale) calls attention to the danger of substituting heroin for morphine in the treatment of morphinomania. The writer has observed twelve cases of addiction to heroin, some of which were primarily, though the majority were secondary, and owe their origin to attempts on the part of the patients to relieve the symptoms incident to the withdrawal of morphine by substituting heroin. All of these patients were much more toxic than morphinomanaiacs who took equivalent doses. Cyanosis and general depression were marked, and the power of resistence was very poor. While persons addicted to morphine may appearently be brilliant mentally, the subjects of heroinomania show signs of intellectual torpidity. It would seem that heroin affects the medulla rather than the cerebrum, a supposition which explains its effect upon the circulation and respiration. Of the two drugs, Sollier considers heroin to be the more dangerous.

It is more toxic; those who are addicted to it withstand its effects a shorter time than hose who take morphine in equivalent doses.

Convalesence is more protracted, and is attended by a much poorere reaction to treatment than is convalescence from the morphine habit.

The danger of habituation is as great as it is to morphine.

Moreover, while it has been found that one-tenth the accustomed dose of morphine will relieve the alarming symptoms of collapse, in the case of heroin recourse must be had to active measures, such as the injection of ether, etc.

In heroin poisoning, too, the syncopal attacks are of respiratory and not of cardiac organ. Without warning the patient is seized with dyspenea, becomes syanotic, and loses the power of drawing air into his lungs, it seeming as though the muscles of respiration were temporarily paralyzed. If bulbar activity cannot be aroused death may supervene.

In the treatment of heroinomania Sollier recommends the immediate substitution of morphine followed after a short time by the rapid withdrawal of the latter and the measures usually employed.

The Differential Diagnosis of Hay Fever and Asthama.

Wolff-Eisner (Deutsch med. Wochensch) says that asthma due to hay feaver can usually be differentiated from other forms of asthma by means of the anamnesis. Hay fever patients are usually attacked by their disease at at a certain definite date, corresponding to the flowering of rye or other grasses in their locality. The hay fever ceases as soon as the period of flowering is over and does not recur until the following year. The differential diagnosis is often of great importance, not only as regards the locality and general treatment, but especially as regards sending such patients away. Localities that would be particularly suitable for patients with bronchial asthma might be the worst possible for those with hay fever, and the reverse. In cases in which the anamnesis and the physical ex-

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amination do not permit a definite diagnosis, the writer advises the following procedure: Pollen of rye, grasses, corn, etc. (in this country especially rag-weed) are triturated with physiologic saline solution, centrifugated and the clear liquid preserved for future use. A few drops instilled into the eye of an individual not subject to hay fever produces no effect. If the patient, however, be a hay fever subject, a typical conjunctival injection with swelling and much discomfort promptly results. There may even occur a coryza with sneezing and asthmatic attacks. All of these untoward symptoms can be cut short by the subsequent instillation or insufflation of pollantin. In this manner a definite diagnosis is always rendered possible. Dunbar has advocated a similar use of his "pollen-toxin." The latter is an extract of pollen grains, purified by precipitation with ammonium sulphate. According to the writer, this method of preparing the toxin greatly diminishes its toxicity and leads to untrustworthy results. The author that only extracts of fresh pollen grains with physiologic salt solution should be used.

Miscellaneous.

Report of Case of Valvular Heart Trouble.

January 10th, 1902.—Mrs. S., aged 56, weight 225 when in normal condition, has been unable to lie down for four weeks, though able to walk about the house to a limited extent, until within the past ten days.

Dyspnoea distressing and constant, and worse at night.

Heart action from 100 to 110, feeble and remittent.

Urine scanty, with slight amount of albumen.

The tissues of the body generally filled with serum. The limbs are enormously distended to the thighs, the abdominal cavity containing much fluid, the face oedemic.

The case having been treated by two skillful physicians with no improvement, a change was decided upon after the diagnosis of fatty degeneration of the heart with prognosis of "No hope" had been announced.

Upon examination of the case, I added to the diagnosis already made that of dilitation with little compensation.

Frankly, I also felt that the possibilities of recovery were slight. Commenced the treatment with no change in the remedies save the exhibition of morning doses of Elaterium which secured copius watery evacuations. This reduction of the anasarca together with the administration of the usual heart remedies seemed to give but little relief to the dyspnoea. In about ten days I dropped all former remedies save the Elaterium and occasional doses of Strychnia, and commenced giving Anasarcin, which to me was an untried remedy at this time. I got such prompt relief within a few days that the patient had to admit an improvement. The heart's action became quiet and regular at 90. This treatment was continued for two or three months, when I ceased visiting her. as a visit involved a trip of 25 miles and return.

She remained in good health for over a year, requiring no medicine in the meantime. A cold with severe cough caused a recurrence of the disturbed heart action with gradual appearance of the old train of symptoms. After control of the cough was effected, Anasarcin alone completed the cure.

This cure has been permanent up to the present.

The results in this case are so wonderful to me that had it been narrated I would have been inclined to be incredulous, I fear.

M. G. McB., M. D.

November 23rd, 1905.

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Dr. John V. Shoemaker says that "the peculiar efficacy of the Buffalo Lithia Water lies in the fact that its composition approximates that of the serum of the blood; therefore it is admirably fitted for absorption into the blood current and immediate incorporation with the watery portion of the nutrient fluid. It becomes at once identical with the blood serum."

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Puerperal Sepsis and Pre-Existent Sepsis

At the recent meeting of the German Association of Scientists and Medical Men, Professor Freund reported a case of high importance both from an obstetrical and a medico-legal standpoint. A primipara was spontaneously delivered in the Professor's own maternity department. She had all the advantages of good nursing and skilled investigation; it was ascertained that she was the subject of latent phthisis, and the sputum was examined, but no tubercle bacilli were found. On the sixth day of the puerperium the temperature suddenly rose, and never fell till the patient's death on the twenty-eighth day. There were frequent rigors, Aronsen's serum was administered with little or no effect. There appeared at first to be no local lesion, but when the temperature had been high for a week, Freund detected a very painful swelling, the size of an egg, on the lower part of the sacrum. It seemed at the time to be no more than a complication in a bad case of puerperal fever. A careful post-mortem examination was made. The conditions discovered were—plugging and phlecitis of the larger veins of the pelvis, old and recent pleurisy, a pulmonary infarct, old pulmonary tubercle, and suppuration of the left sterno clavicular joint. The peritoneum, let it be noted, as well as the genital tract, was free from evidence of disease. All these conditions discovered after death might have been explained by the hypothesis of ordinary puerperal infection from without, but Freund, suspicious about the absence of primary lesions in the uterus, coupled with the

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development of an inflammatory swelling over the sacrum, ordered the parts around that bone to be carefully dissected, and also directed that inquiries about the patient's recent health before delivery should be made. The result was instructive. There was primary osteomyelitic focus between the sacrum and the coccyx, a cavity with walls of broken-down tissue and full of pus. The coccyx itself was bare of periosteum and osteomvelitic foci were diffused over its bony tissue. The patient's husband was able to supply essential evidence: he remembered that she had suffered during the last months of pregnancy from severe pains in the lower sacral region, walking was very painful, and rising from the sitting posture caused much suffering. Thus it was revealed that the patient died from sepsis derived from within, not from without, yet a wrong diagnosis was nearly made, although the patient was in the hands of experts up to her death. Even when the necropsy was made the pathologists nearly came to a false conclusion. The moral is clear: we must always make sure, when a woman in childbed is seized with fever, about the source of Infection. In our zeal for seeking for proofs of imperfect sterilization of towels and instruments we may overlook a septic focus in the subject herself developed before delivery.—British Medical Journal, Dec. 30th, 1905.

The "Superiority of Liquid Medicines over Alkaloids."

The liquid proprietary nostrum manufacturers, in a desperate effort to stem the tide of professional opinion in favor of the definite, certain, unvarying active principles, are causing certain articles to appear in the journals under their control, tending to confuse the mind of the practician. To show how puerile, how self-condemnatory the articles are, we will take up their arguments.

One of the arguments is that the liquid medicines are more rapidly absorbed. "The rapidity of absorption of fluids by the blood will prevent the cumulative action which sometimes results from the use of alkaloids. This is a factor which should not be forgotten. Many deaths could be charged to this mode of action in the alkaloids."

This statement is as silly as it is untrue, and as untrue as it is silly. One might suppose that the alkaloids are insoluble substances, and that they cannot be administered in solution. It would be insulting to the intelligence of our readers if we were to tell them that the alkaloidal salts—the form in which alkaloids are always administered—belong to the most soluble of compounds. They are all readily soluble in cold or warm water.

But suppose the alkaloid is administered in the solid state—i. e., in pill, granule or capsule form. Being soluble in the gastric juice, not being enmeshed by a lot of inert matter, the alkaloid is dissolved at once and is absorbed rapidly.

Not so with the galenic preparations. There the alkaloid is usually in a state insoluble in aqueous menstrua. For instance, you cannot get out the strychnine from nux vomica, the quinine from cinchona by macerating in water. The menstruum must be strongly acidulated with sulphuric or other strong acid before the active principles can be dissolved out. And only too frequently the gastro-intestinal mucosa and glands are unequal to the task of separating out the active principle. Several doses accumulate for a time—and then something occurs, making absorption possible—and here we have the cumulative effect.

And it isn't true that cumulative action is to be feared from the alkaloids; just the contrary is true! For instance, all the reports of the cumulative action of digitalis are reports on the galencial preparations of the drug. We are not familiar with any reports on the cumulative action of digitalin. And this is a point of the utmost importance for every practician to remember, a point which has not perhaps been sufficiently emphasized before: most of the alkaloidal salts in the form in which they exist in plants are soluble in alcohol, ether and strong acid media, but insoluble in water media, while the prepared and extracted alkaloidal salts—the sulphates, nitrates, hydrochlorides, etc., are soluble in water and in aqueous menstrua.

The second argument is: "The alkaloids, when you have said the best you can in their favor, are at best only a part of the original plant." Of course they are only a part, but the best, the useful part. Nobody claims that sugar is the same as sugar cane, but we are perfectly satisfied with the sugar, leaving the mark to the cows. "Who would be rash enough to assert that all of the good of cinchona lies in the quinine or that of nux vomica in the staychnine?" Nobody has ever asserted it. Cinchona has other valuable alkaloids—cinchonine, cinchonidine and quinidine, and they are isolated and used as such. On the other hand we would ask: "Who would be rash enough to assert that the wood of cinchona has definite remedial properties, after the quinine, quinidine, cinchonine and cinchonidine have been extracted? And who would care to treat a case of malaria with the crude cinchona, instead of the alkaloids, anyway?"

And as to strychnine: we can do with strychnine whatever good can be accomplished by nux vomica, but in a shorter time and in a safer and more definite manner; but we cannot always accomplish with nux vomica what we can with strychnine. Tell us honestly: in a case of heart failure or collapse, to what would you pin your faith, to nux vomica or to strychnine? And the same can be said of every plant that has an insoluble active principle.

The liquid nostrum manufacturers and those interested in the sale of galenical preparations of uncertain strength will have to bring forth stronger arguments, before they succeed in stemming the tide towards rational, definite, certain, scientific therapeutics.

The Rationale of the use of Iron in the Treatment of Phthisis.

It is a singular, yet significant, fact that, with the exception of a single disease, there is always a slight diversity of opinion among physicians as to which one of a number of agents exercises the greatest curative influence upon a given disorder.

The one exception is phthisis. The entire profession is united in the conviction that pure air, more than any other one factor, exerts a controlling influence upon the development of phthisical manifestations. Indeed, physicians concur in the opinion that, with the proper quality and quantity of atmosphere, this most widespread and fatal of all human maladies can oftentimes be cured.

While the beneficial influences of climate upon phthisical individuals has long been recognized by the profession, a perfect understanding of the exact manner in which atmosphere arrests the progress of the disease is a comparatively recent acquisition.

The opinion at one time obtained that mountainous and elevated districts were beneficial to phthisical subjects on account of the elevation alone. Recent investigations have disproved this theory. It is now an accepted fact that elevation, per se, is of little or no importance. On the contrary, the seashore is ofttimes better adapted to phthisical individuals than regions of a much higher altitude.

While it is true that the higher the altitude, the less prevalent is phthisis, the explanation is that atmospheric impurities are less abundant and ozone is more plenteous in such regions than elsewhere. In other words, it is conceded that the absence of atmospheric impurities and the presence of ozone are the chief elements in the cure of phthisis, and that any section, high or low, which affords these

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The benefit derived by consumptives from living in or near pine forests, is a matter of common observation. The turpentine exhaled from pine trees converts oxygen into ozone, and the atmosphere is thus purified by the process of oxidation.

Having repeatedly proved that the direct inhalation of ozone is of little, if any, benefit, we are forced to the conclusion that it is not ozone which arrests the progress of phthisis, but the systemic oxidation which is brought to the maximum by the inhalation of a perfectly pure atmosphere.

In fine, we are now agreed that if systemic oxidation can, in any manner, be maintained at the proper standard of activity without exhausting the vital forces of the subject, the progress of phthisis can be checked, and very frequently completely cured.

Although the benefits derivable by phthisical individuals from an atmosphere that is conducive to a full measure of systemic oxidation are immeasurably great, the fact remains that it is not always within the power of the physician to induce the patient to move to a region affording such an atmosphere. The patient may, through inability to pursue his vocation, be financially unable to make a change of residence, or he may be influenced by the optimism peculiar to phthisical subjects, to postpone the change until the disease has progressed too far.

When, for any reason whatever, it is not possible

o change the abode of these subjects, it is within he power of the physician to check the progress of he disease by the augmentation of systemic oxidaion.

While all forms of iron increase systemic oxidation by converting the oxygen in the economy into ozone, the mucous surface of the alimentary tract of phthisical subjects is usually too enfeebled to absorb iron unless it is presented in the organo-plastic form. For this reason, Pepto-Mangan (Gude) affords results which cannot possibly be secured from any other preparation of iron.

In addition to promoting oxidation to a surprising degree, Pepto-Mangan (Gude) invigorates the digestive functions and increases the nutritive processes most markedly. The appetite of the patient is improved, the wasting is arrested, and the vital resources are greatly enlarged by the continued employment of the preparation.

A Tonic During Convalescence from acute Lung and Bronchial Diseases.

The large number of cases of pneumonia, bronchitis and other acute diseases of the air passages prevalent during the winter and early spring that will confront physicians, put them on the qui vive for agents of a remedial nature that will assist them in their winter's work. Opinion as to the proper management of pneumonia differs widely, one man adhering to a certain mode of procedure and another employing another method of treatment. Owing to the very nature of the disease, there could scarcely be any uniformity of treatment. The point at issue is to keep the inflammation under subjection as well as possible, guiding the patient with the same cool and steady hand a mariner uses in steering his craft through a treacherous channel.

But even with defervescence of the disease established, the trouble is not yet over; there are still some rocks and shoals, and possibly not charted. It is at this time when the need for a tonic constructive is clearly shown. The patient should now be put upon Hagee's cordial of cod liver oil. This is one of the best known of the cod liver oil preparations, and its palatability adds very much to its efficacy as a remedy. Hagee's cordial will prove acceptable to stomachs that are intolerant of ordinary cod liver oil. Its therapeutic value is much enhanced by the addition of the hypophosphites of calcium and sodium.—The Medical Mirror.

Treatment of Echinococcus Cysts of the Liver.

Biondi advises in unilocular cysts, single or multiple, if non-suppurating and not adherent, laparotomy, complete evacuation, injection of fluoride of silver in 1 per cent. solution, and suture of the liver and abdominal walls. If adherent and non-suppurating evacuation without laparotomy and silver injection. In non-suppurating cysts with proliferating cysts, laparotomy, evacuation, irrigation with normal salt solution or disinfection with silver, suture of the sac. In single and multiple suppurating cysts, marsupialization after the Lindemann-Landau method, and silver irrigation. In small, free, pedunculated cysts, enucleation and suture. In an entire lobe filled with cysts and easily pedunculable, resection and suture. In case of alveolar echinococci not susceptible of radical treatment, excise as much as possible and treat the rest by injection of fluoride of silver.—La Reforma Medica, February, 1905.

Severe Chronic Radiodermatitis Cured by the Galvanocautery.

A patient of Springer had suffered for three years with badly ulcerated fingers—the index and the middle finger—caused by frequent and long exposures of the right hand to the x-ray. The fingers were cracked and bloody, the phalanges thickened and stiff, and the nails atrophied and striated. On the large joint of the middle finger was a fungous growth. The injured members were extremely sensitive to contact. Various methods of treatment had failed to ameliorate the condition. Springer, before having recourse to amputation, for which the patient begged, attempted to destroy the mushroom-like growth and its base by means of the galvanocautery. Cauterization was practiced and was carried deep. A deep eschar, dry and hard, formed and fell off on the sixth day, when the dry dressing was removed leaving bare a healthy wound, covered with small red granulations. The raw spots were bathed with a solution of permanganate of potash, followed by the application of hydrogen peroxide. Simple dry dressings with salol were employed. At the end of three weeks the operative wound was entirely covered with healthy skin, which was supple, and solid, and which remained so. The tissues of the middle finger at the same time became normal and regained their normal functions.—Revue Francoise de Medecine et de Chirurgie, October 16, 1905.

"Neodosha, Kansas, April 14, 1906.

The Anti-Uric Company,
Peoria, Illinois,

Gentlemen:—

Replying to your favor of the 12th. I thank you for the courtesy extended therein. I can appreciate that you have confidence in your remedy for it is well worthy of it. I must admit that until I received your sample I had not seen or used Uric-Antagon and had but the slightest idea of what it was. My six years' service in the U. S. Army, as Surgeon, had given me no opportunity to use it or many other valuable drugs not found in the list of supplies, and when I tried it at first it was with but a small amount of faith. I had results good enough, however, that I ordered three bottles and following that the gallon bottle, which I am now using and which is getting toward the dark and dreaded bottom—for that means buy more.

I have used the remedy alone and in connection with other remedies and there has never been a failure. It has the cure of several cases of muscular soreness to its credit where bad elimination was the primal cause. It has cured rheumatism and it has shown itself to be a good diuretic. However, I could sum it all up with the phrase, "I like it."

With kind regards, I am,

Very truly yours,
(Signed) J. F. JONES, M. D.

Note on Administering Quinine.

Any experienced physician knows instances, especially in cases of low fevers, where quinine pills, tablets, and even capsules have been passed by the patient unchanged. In Coco-Quinine, the true unchanged quinine sulphate crystals are suspended in a bland, chocolate flavored syrupy medium, which disguises their taste, yet exposes them to the action of the digestive juices as soon as swallowed. The quinine dose may be large, yet so palatable that "A child will take it and lick the spoon." There is no necessity of forcing patients to swallow pills or tablets of quinine, children especially should be given Coco-Quinine, each teaspoonful contains 2 grains of pure quinine sulphate and no other alkaloid of cinchona.

If you have never tried this preparation write to Eli Lilly & Company, the makers, and they will cheerfully send you a sample. It is the ideal way to give quinine sulphate to small children and to patients to whom pills and capsules are inadmissible.

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Medical Society of North Carolina: President's Address. The Importance of Establishing a Higher Standard of Preliminary Education for Students of Medicine.

By Edward C. Register. M. D., Charlotte, N. C.

Mr. Chairman, Ladies and Gentlemen:

The eminent men, who, through your confidence and through your courtesy and good will, have been permitted to occupy this position, have referred to the honor of this office, to the responsibilities attached to it, and, most feelingly, to those who have preceded them.

When I recall to mind these beautiful references, when I think of the brilliant men who have been president of this Society, men who have preceded me, I feel more than ever my anxiety and my timidity, the need of your assistance and your advice.

There has never been a time in the history of this organization or in the history of Medicine when medical progress was more active than it is now, when facts and theories were appearing so fast. One is startled at what he has missed if he fail to read Medical Journals and attend Medical Society meetings for only a few months.

Since the relation of bacteria to disease has been discovered much of pathology has been revolutionized and many changes in the treatment of medical and surgical cases have followed. Our ability to observe has been greatly aided by the numerous mechanical and physical means now at our disposal. With these means a correct diagnosis of many diseases once obscure is now easy, their pathology understood and the treatment simplified and effective. Chemical discoveries are now throwing new light on many physiological processes and appropriate therapeutic agents are fast multiplying. Specialists in the several branches of medicine and surgery are being developed and fostered; they have their organizations and departments of investigation; they are achieving results that arouse our admiration and enthusiasm. Without their skill and without their accomplishments many cases would be neglected and many lives sacrificed that are now relieved and made strong.

Within the past two decades, through the aid and influence of a few of our great men, many special facilities for original research have been established. We can think of no beneficence from which greater good can emanate than from laboratories and establishments of this kind where scientific principles are coined and where we have a basis to achieve a more perfect technical development. For several years the activities of the medical profession have not been confined to medical principles alone. We find that through the influence of medical organizations like this and through their energy and wise direction many laws for the protection of the public and for the prevention of many kinds of disease and for the care and cure of the afflicted have been enacted. Scattered through nearly every paragraph of these enactments we see evidences that our legislative committee has done a great deal to elevate the standard of medical education, to make effective our sanitary and quarantine regulations and prevent the adulteration of food and drink and to care for the insane and feeble minded.

It has occurred to many of us, no doubt, that our lay friends, the general public, do not, every time, understand our efforts, the high motives of physicians, or appreciate their sacrifices. Prominent officials sometimes depreciate our work and do not interpret correctly our motives. It would be much better for the people of the State if some of our judges could be made to believe that our methods tend to better principles; to higher ideals, and to a more perfect professional development.

My address, therefore, will, in a way, deal with the relation of this Society to the people of the State.

Socially, and in a way professionally, each of us establish our own social and professional position:—this we will not discuss. It is our relation to the State collectively as a body, that we are especially interested. Our united efforts, which are the efforts of this body, have accomplished a great deal.

In 1858 our General Assembly enacted a law creating the Board of Medical Examiners of North Carolina and entitling only licensed physicians to testify in our Courts, as experts. This was the beginning of medical legislation in this State.

In 1885 the law was amended in such a way that it was a misdemeanor to practice medicine in the State without first obtaining a license from our Medical Examining Board, and in 1897 all applicants for examination before this Board had to possess a diploma from a reputable medical school.

The establishment of a Board of Health with sanitary and quarantine regulations are still further evidences of the important relations we have created, and that now exist, between this Society and the people

of this commonwealth.

While we have through this body brought about these essential relations we are still far from an ideal relationship. When a member of the Medical Examining Board I noticed, and my associates on the Board also observed, that a very large per cent. of the applicants for license showed many evidences that they were not primarily prepared to begin the study of medicine. Many of these young men seemed to be competent professionally and well trained technically, but their literary, pre medical qualifications were very defective. It was perfectly plain that we were admitting, to what we always considered a learned profession, men who were not learned, men who were not educated, and men who will, with a notable exception occurring now and then, go through their professional lives laboring under many disadvantages. They are unfit to represent the profession before the people. They can not, and never will, conceal their literary defects. They have not the kind knowledge to recognize their mistakes, in themselves. Their efforts will always be depreciated and they will never have the applause and the support of the thoughtful and cultivated.

The medical profession of North Carolina, if it wants to keep in line with other States and other countries, ought to undertake to correct these defects in our system, legislative changes should be advised. We need, and it is practical for us to have, medical laws created that will provide that it shall be essential for a young man beginning the study of medicine, or before he can obtain his license, to have an essential, non-professional knowledge, certainly to the point where he can speak and write the English language correctly.

The Council of Medical Education, created by the American Medical Association has made many valuable suggestions concerning the reforms necessary in medical training, particularly that which pertains to the elementary qualifications of medical students. This Council has had several conferences with delegates from the different States and Territorial licensing Boards, representatives from the associations of medical colleges, from the Government medical services, and eminent men who represent colleges of the liberal arts. These conferences have been well attended and they have been regarded as a distinct success. At the Chicago Conference held sometime ago reports of several committees on preliminary education, on accessory technical studies, were read to furnish a basis for discussion. As a result of these discussions the American Medical Association, at its approaching meeting in Boston, will very likely take steps to encourage the creation of laws in each State that will provide that all students beginning the study of medicine shall have at least a high school education, or such training as will admit them to our recognized Universities, these qualifications to be passed on by specially designated State authorities, such as the Superintendent of Public Instruction, or his representatives, and not by the faculty of a medical school. This is what we want here in North Carolina; it is what we need, and we ought to make the change without the suggestion or aid of outside influences.

This Council wisely concludes after carefully considering the matter that a discussion of reciprocity is not at this time advisable. There is not so much difference between the technical qualifications required by the different examining Boards of the different States as there is in the minimum standard of the entrance examinations in the different schools.

The chief functions of all important Medical Associations should be the elevation of medical standards, the promotion of a higher professional education, and it should be the avowed purpose of this Society to secure within a reasonable time as high a minimum standard of medical training as that of any State or any Country in the world. Our position as a civilizing power and our position in commerce and our relation to the arts and to the sciences demand this of American medicine. An elevation from the present condition to a higher minimum standard that we advise, ought to be brought about slowly in justice to all concerned.

Many of us have been taught to believe that North Carolina is in the lead of all other States in perfecting legislative enactments bearing upon the practice of medicine, and that the United States is leading the world in medical progress. This may be so in many departments, but it is not so in others. These changes that I have roughly outlined are already practical laws in several States. These ideas were not original with these people. They got them from other countries. There is not a nation in the world that pretends to be civilized that does not have a system to determine when a young man is capable of beginning his professional training. Even Japan many years before she was considered civilized by our International legations, had a system that clearly set forth the conditions, with which all who contemplated the study of medicine had to comply. And Russia, a country that has, according to our advices, a very unstable and corrupt government, is well regulated along these lines. Why is it then that our people who are so progress-

ive and so energetic, a class of people who easily lead the world in commerce, in great financial enterprises, should be so indifferent to measures that are valued so highly by the same class in nearly every other country?

In the United States there has been a tendency for many years to increase the time devoted to medical training proper. This inclination has not been confined to medicine alone. the same influence has been noticed in all the professional schools. Possibly it is equally as conspicuous in the various lines of engineering and technology, or the departments that equip men for work in trade or commerce. In all these spheres of human activity the influence of modern scientific studies have been felt. If the physician wishes to obtain a perfect technical development, if he desires to keep in touch with the progressive ideas that are so much in evidence in all of the other professions, if he intends to be familiar with, and master the methods and principles of medicine and surgery, and if he expects to be able to think and to grasp complicated ideas, to be a leading citizen and a scientific physician, his training must be thorough, and it can not be thorough unless he has a general and liberal knowledge prior to the study of medicine. Of all the students and members of the so-called learned professions, it is necessary for the physician to be trained in more kinds of scientific study than any other man. To begin with: he must know the English language; he ought to have a knowledge of the classics, and he must know something of Physics and a great deal about Chemistry, and, technically, his studies must include many different sciences. Every advance in any of the sciences of medicine or surgery increases the importance of a more perfect preliminary qualification. There is a belief, that may be correct, that this training, which seems to be so essential to the successful practice of medicine and surgery, has, in many parts of the country and among some of the students of this State, reached a satisfactory point. This conclusion is plausible when we think of the time that must be devoted to the study of all of these essential sciences and that when a student incorporates a college course of the old type with his technical education the greatest efforts of his life have been exerted before he begins the practice of medicine. To insist on a uniform high standard that includes a preliminary college course of the old type is not practical and will do harm. It is evident, therefore, that we have to deal with conflicting ideas as to the relative value of a high standard of general education or a high standard of the technical sciences or both. This conflict of ideas involves many different issues and deals with methods of much perplexity. When we compel our young men to give over four years of their time to professional training we are apt, in many cases, to observe that their general knowledge has been neglected. Especially is this so if the former is compulsory and the latter optional. It may be well enough to have a very high professional standard as it is here in North Carolina, but if we advocate a still higher standard and neglect the college or high school training, that is so essential to the professional man, we are apt to make a mistake.

I admit that modern medical colleges incorporate so many of the sciences that are at the foundation of the study of the principles of medicine and surgery, that it has in a way, reversed the old order of things, and it is not so essential for the student of medicine to spend as much time in the high school or college as it once was.

If our professional schools continue to increase their curriculum until every science ond enough of the arts are taught that are essential to thoroughly equip the young medical man, then the question, as many consider it, will be solved, but now we seem to be a long way from this ideal. There is a belief that the young man is better equipped if he acquires as much of his professional knowledge as is available outside of the medicol school proper. All of our universities and many of our colleges are well prepared to teach the sciences that ought to be the basis for the successful study of medicine. Here they are in an ethical atmosphere that will broaden their views. They are amid a set of associates that bring them in contact with non professional life, on as many sides as possible. On the other hand, in the medical school they are in an atmosphere that reduces these outside influences to the minimum and encourages them to narrow their efforts to strictly professional thought.

When this plan prevails, when the student obtains his knowledge from a strictly professional institution, he has not the accomplishments, the breadth and tact to deal as successfully with the social and semi-medical problems that come up every day in the medical man's life, as the student of medicine, who has had different training and different environments. Of course, it is generally known that knowledge is more specific when obtained in a technical school with few and simple surroundings, but specific information, when it takes the place of knowledge of the principles of things, is not of as much practical value.

We have fallen into the error of believing that men of their own accord, without be-

ing forced to do so, will acquire a general knowledge before taking up even the initial sciences of medicine. We have hundreds of examples to show that they will not. The per cent. of young medical men now entering the profession who can not enter the eighth grade in our Public Schools is very large. I believe that every member of the examining Board of this State, certainly those who were associated with me, have this belief. This ought not to be the case. An effort to reform such a system is our obligation; it is a duty we owe to the community, to the people of the State and to the profession.

Other States are fast eliminating such objectionable obstructions to their progress, and unless we follow them we will have to contend with many undesirable influences, to which our present defective methods subject us.

Gentlemen, when we think of the rapid advancement in medical knowledge and the many changes that are so fast taking place along medical lines in other States and other countries, and what we need here in North Carolina, we naturally think of what the attitude of this Society would be to such needs of reform if its policies were now coined by such men as Pittman, O'Hagan, Wood and Thomas.

If we want to lead in medical legislation as we once did, if we wish to keep in line with medical thought, to aid in making medicine a more exact science, or if we are even content to keep in touch with other States and other Countries, with the different professions and the different organizations, there must be no defect in any part of our elementary training, or of our technical growth, or of our knowledge of the basic principles of medicine or of surgery.

X-Ray Treatment as a Preventitive of Recurrence Following Extirpation of Malignant Growths.*

By W. D. Witherbee, M. D., Charlotte, N. C.

There is probably no one disease in medicine which is of such general interest to the medical fraternity as this; not alone to the specialist but to every general practitioner, for there is not an organ or tissue in the body that may not under the proper circumstances be invaded by some form of malignant growth.

For convenience of description it might be well to divide all malignant growths into superficial and deep. The superficial being those forms that are ordinarily called epitheleomata. The deep including the various forms of carcinoma and sarcoma.

The most chronic and least malignant form of epitheleomata is the rodent ulcer, which usually makes its appearance late in life, somewhere about the eye or nose. It is usually first noticed by the patient as a small scab or crust, which soon drops off, only to form again each time the ulcer itself gradually increases in size and depth. This form, therefore, continues in its growth only by continuity and contiguity of tissue, in which case the line of travel of the cancer is infiltrated by cancer cells, invading only the tissues in the immediate neighborhood and not being carried to the glands and various organs of the body by either the blood or lymphatic vessels. Its growth is slow but progressive and will, if not checked, destroy the life of the patient.

The other forms of epitheleomata often start in the various warts and moles, which for some unknown reason generally attributed to chronic irritation suddenly take on a malignant process, which varies much in degree of malignancy; or it may start in an old ulcer as in the case of epitheleomata of the tongue. This form may have secondary deposits in the various lymphatic glands that filter the lymph coming from the part affected. This lymphatic involvement from any tumor or ulcer depends largely on the rapidity of its growth.

The treatment recommended in these cases is the use of a paste which may contain any of the deep caustics or escharotics, or treated surgically by complete removal, or by X-ray.

In some of the more chronic and least malignant cases the paste will sometimes remove the condition, however, this too often fails and only sets up an irritation that produces a great activity of cell proliferation and thus lights up a most rapid malignant condition so that the use of another plaster may be practically impossible. In removing cancer we are told by the surgeon to cut wide of the disease, this done it often happens that the disease soon after returns in the same place. Even when specimens are taken from the wound after the tumor has been removed and pronounced normal by the pathologist the disease may return in the scar. This goes to show that the infiltration of normal tissue by cells that may be carried from the tumor and have not yet reached the stage of development which would indicate their character so that one cannot absolutely, even with a microscope, distinguish between a normal cell and a pathological cell.

If the X-ray is used in these cases, especially at the time when most cases are treated with caustics, at least 98 per cent. of them will disappear completely. When

*Read before the North Carolina Medical Society, Charlotte, N. C.

exposing the patient to the ray it is essential that the part exposed should extend well out into the normal tissue as well as the diseased area.

The subcutaneous and deep malignant conditions invariably in the course of time spread either to the lymphatic glands or as in the case of melonotic sarcoma, which is spread to every organ in the body by the blood stream. So that on post-mortem examination of a case of melono sarcoma one finds metastices in almost every organ and tissue of the body.

Among the subcutaneous variety the ordinary schirrus carcinoma of the breast will furnish the best example. In these cases the first signs of the disease is marked by the patient noticing a small tumor in the lower and outer quadrant which may be discovered accidentally or her attention being called to it by a few sharp pains in this region. The patient is then referred to a surgeon, who operates immediately. The operation consisting of a thorough and complete removal of the breast exillary and clavicular glands and usually a careful dissection of the deep fascia and a portion of the pectoral muscles. Even with those cases where this most extensive dissection is carried out there are many recurrences.

In doing this operation the best authorities advise first dissecting out the glands and finally removing the breast, taking out if possible the glands, breast, etc., in one mass. The reason given for this procedure is that it has become an established fact that the local recurrence of the disease may be due to infecting the wound with some of the cancer cells during the operation.

From the reports of the recent cancer research committees it looks at present as though there is no definite germ of cancer and that the exact cause of origin is as yet undetermined, also that a cancer cell when carried from the original sight has the power to grow and produce a malignant condition in another organ or tissue.

That the glands in the axilla are involved in schirrus carcinoma of the breast is well known, although they may not show any evidence of it for some time. If the condition is not of a schirrus variety, but of more rapid growth and hence softer and more fungating the glands are involved much earlier. This therefore indicates that the more rapid the growth and the softer the tumor the more quickly are the cells liberated from the mass and carried by the lymphatics to the neighboring glands.

The process of invasion of both the local tissue and the lymphatic glands might be compared for the sake of illustration to a sponge filled with water, surrounded by a layer of cotton placed in a rubber bag from which various small tubes may extend. Any pressure then on this bag will express the water from the sponge to the cotton and then out through the various tubes. The sponge representing the tumor, the cotton the local tissue and the tubes the lymphatics.

Now as these rapidly growing cancers as well as the schirrus variety are often found in regions where it is practically impossible to avoid pressure, it is therefore true that malignant conditions occuring in these regions spread faster and produce fatal results much sooner than malignant conditions in other locations.

Suppose then the surgeon in operating on a case of this kind has carried out a most complete dissection and removed the whole mass of glands, breast and tissue as recommended and has kept wide of the disease only cutting in healthy tissue and then has a recurrence.

I believe that the operation at best is crude for this reason. The object of the surgeon in these cases is to remove every cancer cell that is present and this he cannot do until some means is devised to point out just how far the cells have been carried into the neighboring tissues and glands, even though he does not infect his wound directly by opening into the original tumor itself and allowing it to discharge some of its cells into the wound.

Some of these cases do not recur and in those that do recur some time elapses before it makes itself evident provided the operation has been complete, therefore I believe that before long all surgeons will consider a course of X-ray treatment immediately after the operation as essential as the operation in that it will destroy the few remaining cells which cause the recurrence and in this way greatly increase the percentage of complete cures.

In regard to the time the X ray treatment should be begun, the patient should be treated on a stretcher the day following the operation. This may seem rather a radical procedure, nevertheless the cells which may be in the open wound or in the adjacent tissue will be more completely destroyed in a much shorter time when the wound is fresh and open than when one waits for union before beginning treatment. The open wound not only greatly facilitates the direct action of the ray on the remaining cells, but also affords free drainage for all the lymphatic vessels in this region which may be laden with cancer cells.

It might be said by some that this treatment will interfere with the healing of the wound because the ray would produce a certain amount of endarteritis and thus interfere with the granulation tissue and produce more scarring. Even if the wound

was delayed in healing and a larger scar resulting, all of which can be avoided by careful dosage, it is nothing as compared with the recurrence which so often follows.

In cases where radical operation is impossible and the chances of complete recovery are almost nil the course of X ray treatment will lessen the discharge, control the hemorrhage and to a surprisingly great extent allay the pain so that the patient during these last hours will be made more comfortable and thus die of exhaustion similar to cases of pernicious anemia and old age instead of the suffering and agony usually seen in the last stages of this disease.

The Imperfect Development of Certain Organs a Factor in the Genesis of the Special Diseases of Women.*

By B. S. Moore, M. D., Charlotte, N. C.

It is a well known fact that in animal life the higher the animal organization the less prolific are the generative organs, and among men the higher the state of civilization, the smaller the number of children born.

It is also true that in the same community the better classes and more highly developed, intellectually, have fewer children than the poorer classes who use their muscles rather than their brains to earn a living. In other words the higher the scale of development intellectually, the more suppressed are the generative organs.

It is a well known fact that among the poor where relatively more children are born, a larger number die under the age of five years; for the poor can not give them the care and attention that is devoted to the children of the rich and more intellectual—that is, the children of the rich and more intelligent, who are sickly and feeble, are more apt to reach puberty than the children of the poor, for among the poor the law of the "Survival of the Fittest" is not so much interfered with as it is among the rich and more intelligent.

We should therefore find, relatively speaking, more cases of uterine disease among the children of the rich than the poor and more women with uterine disease among the rich or people most developed intellectually.

It has been claimed by some that we have more uterine disease here in the United States than they have in Europe. If the people in the United States are more developed mentally and further advanced in our modern civilization, then we would be certain to have more uterine disease.

Aside though from these more general influences of race development, and the natural tendency of modern mental and civilized influence to suppress the generative organs, there is a very much worse influence at work in causing uterine disease and that is the general tendency to restrict the physical development of our females by limiting their out of door exercise during the years of adolescence, and the marked modern tendency to force mental development during these years when they are changing to women.

There is very little doubt but that in the United States this practice is more marked than in Europe and no doubt that it is practiced here in the South more than anywhere else and, in my opinion, is one of, if not the most vital, cause of many of the troubles which we term Diseases of Women

The generative organs are not essential to the life of the individual, they are the last organs to develop and they lie practically dormant from early childhood until the girl reaches the age of adolescence (from about 10 to 16). Then during this time they develop and make a large demand upon the entire system.

It is a well known fact that our domestic animals will not stand any continuous strain at even ordinary work during development or before development without serious injury to the form, strength and usefulness, and the same applies to the human body.

To be sure of full development a girl must have a surplus of vitality during the period of development and that if this vitality is closely used up by, especially, mental or emotional work or strain, the generative organs will fail to develop sufficiently to perform their functions normally. If a girl is pushed at school, or her energy used up by constant contact with older and more intellectual people from the age of ten to sixteen, she is almost certain to have a leucorrheal discharge, irregular and painful menstruation, and when examined locally an infantile antiflexed uterus will be found, with such a diseased condition of the glands and follicles about the cervix as to cause a semi raw state, which we call a granular erosion and the older physicians treated as ulceration.

Bad hygienic surroundings, a serious illness, or more especially anything that brings about an anemic condition during the period of development, is pretty sure to result in an imperfectly developed uterus, dysmenorrhoea, sterility, &c.

A young woman may appear to be in good health and seem to be well developed and yet she may have an imperfectly developed uterus; as a rule leucorrhoea is one of the first symptoms, and usually dysmenorrhea soon develops; not infrequently a patient comes complaining only of a dragging feel-

*Read before the recent meeting of the N. C. Medical Society at Charlotte.

ing about the pelvis or a pain in the left side, usually with marked constipation, and often with fissure-in-ano or hemorrhoids, and on examination a well marked case of granular erosion will be found, the usual dysmenorrhea being absent.

Sometimes the only indications of imperfect development and disease of the glands of the cervix is a pain in the left side and an uncontrollable nervousness, with more or less depression and hysteria as the woman grows older. If the case is not soon treated the menstruations become irregular and later, profuse; the latter symptoms being due to the constant irritation resulting in congestion and abnormal vascularity and finally to the development of what we call fungus granulations in the endometrium above the os internum. Typical cases of imperfect development are to be found, especially in the graduates of our female colleges, for to graduate from such schools requires lots of hard work and the work is usually done during the years of adolescence. I feel that the best rule that our female colleges could make would be that every applicant must be fully developed physically.

The abnormal conditions caused by imperfect development does not stop at just causing leucorrhoea and dysmenorrhoea, often, however, further trouble is stopped by early marriage, which is a great stimulant to the generative organs.

The abnormal changes gradually induced by uterine catarrheal endometritis will very often result in sterility. Suppose pregnancy does occur in an imperfectly developed uterus where the os uteri is not only imperfectly developed, but rendered hard and incapable of dilating sufficiently to allow the head of the child to pass without lacerating the cervix? The tissues being filled with more or less diseased glands and follicles, fails on this account to heal and the result is that the existing disease is aggravated, involution is delayed, the uterus remains soft, the ligaments relaxed and this produces the many so-called cases of misplacement, &c. Besides the existing catarrheal disease and favorable condition of the uterus, this makes sepsis more likely to follow labor and abortions.

Excluding new growths, acute sepsis, unclean examinations and applications after labor and abortions, this condition of imperfect development is the real cause of most of the local conditions from which women suffer.

The condition of imperfect development may affect the ovaries and cause imperfect and abnormal ovilation and result in sterility or reflex nervous disturbances. Then this weakened condition of the glands and underlying tissues may produce conditions favorable to the growth of fibromata, cancer, &c. If then these views are correct, much can be done; not only toward the cure but the prevention of the diseases of women.

The great importance of keeping children in good health is very well understood and much has been written on the subject of rest in bed during menstruation, &c. In fact, too much stress has been put on physical rest, but the very important fact has been overlooked that during the period of development, between the age of ten and sixteen, a girl must not only have good health and strength, but this health and strength must not be used up in mental or social development. If it is, the generative organs are almost certain to suffer and fail to develop.

Rest during menstruation may relieve the pain, but if it shuts the girl up and deprives her of out-of-door exercise it does more harm than good, often being a cause in bringing about abnormal conditions and harmful habits, which would not have happened had she been playing out of doors.

The very common idea that all of women's troubles come from misplacements, falls, &c., should be replaced by a broader view. First, keep the general health good, the bowels regular during the period of active development, let healthful out-of-door play and pleasing mental occupation take the place of an indoor life, forced cramming and stimulating contact with old people. Recognizing the fact that a girl has brains to be developed and that they can be best developed after her generative organs have been developed, that to develop their brains and have them so-called accomplished at the expense of their generative organs is to give them the worst possible preparation for a happy and useful life and future.

The importance of recognizing the influence of imperfect development on the treatment of the diseases of women is very great. For example, we treat a case of dysmenorrhea and sterility as being caused by antiflexion; when we straighten the uterus our work is done. But suppose we look upon the small uterus with its semi-raw os and contracted canal as being due to imperfect development, our aim would be to cure the local disease of the glands and follicles, and then stimulate the uterus to development, and we would recognize, unless we succeed in keeping the patient's general health good, and in other ways stimulating healthy development, it would only be a matter of a short time before the abnormal conditions would return.

When pregnancy takes place, examine the patient sometime before labor is expected and bring on a premature labor to pre-

vent extreme lacerations, do not wait for subinvolution and retroversion to become chronic before giving treatment, but ten days after labor begin and give stimulating applications; not merely to sustain the uterus up in the pelvis out of the current of the rectum, and prevent this being pushed down into the vagina by each movement of the bowels, but to stimulate an active circulation and contraction and involution, not only of the uterus, but of the vagina, ligaments and all of the blood vessels which have been dilated and stretched during pregnancy and labor. Beginning ten days after labor and making an application in the vagina twice a week of a firm cotton pledget rolled to the size of about one to one and a half inches by two to two and a half inches long, well saturated in 10% solution of Boroglycerid in glycerine.

In this way we can prevent subinvolutions, misplacements, &c. One end of the cotton pledget should be placed in the cul-de-sac, the other being pressed up by the perinium under the pubic bones. This will fill the vagina in such a way that the uterus cannot be misplaced downward and forward. Leave this for from twenty-four to forty-eight hours; then remove and wash out the vagina with a solution of hot water and borax, then every third or fourth day repeat the application until involution is complete.

This rarely fails to relieve all symptoms and enables the patient to be up and about after the second week, and to go out riding the third week with benefit to the patient in every respect. If this simple process were carried out after all labors—not that I claim that it is always necessary, but in most cases among civilized people—it with rare exceptions prevents further local trouble.

Besides making the uterus an early prey to catarrhal disease, resulting in dysmenorrhea, reflex mental disturbances, and often subinvolution or sterility, displacements, &c., imperfect development may cause serious trouble at menopause.

If a woman has severe hot flushes at menopause and reflex mental disturbances, the endometrium will be found to be extremely painful to the slightest touch. If in such a case you dilate freely, curet and apply pure carbolic acid and drain, you will find that the symptoms will soon disappear.

There is a marked similarity between the contracted and atrophied uterus of an old woman, and the small hardened and contracted uterus of the young women suffering with dysmenorrhea and hysteria.

The influence of chronic uterine catarrh, frequently caused by imperfect development, may result in a hypresthetic condition of the endometrium preventing normal atrophic changes and causing serious reflex nervous disturbances at the time of menopause.

Albuminuria in the Diagnosis of Disease.*

By D. M. Prince, Laurinburg, N. C.

Albuminuria is not indicative of disease of any one organ, nor does it point to any general pathological condition. It is found in typhoid fever, not uncommonly, and, in rare cases, is associated with casts. In pneumonia the scanty, high colored urine often contains small amounts of albumin. In cerebro-spinal meningitis the urine is sometimes albuminous, and the quantity increased. The urine in rheumatic fever is reduced in amount, highly colored, and not infrequently contains albumin. In scarlet fever the urine is scanty and highly colored, and albuminuria is not at all infrequent during the stage of eruption, though of slight amount. It is said that albumin is found in all severe cases of diphtheria. The common chemical test may give rise to the slight turbidity which is found in ordinary febrile albuminuria in some cases, but in others the deposit is heavy and curdy. It is only when the amount of albumin is considerable, and associated with epithelial, or blood casts, that the condition indicates serious organic diseases of the kidneys. During the chill, in malarial fever, albumin is commonly found, and during the course of the remittent type of fever; but Bright's disease, in any of its forms, is of rare occurrence from the direct effect of paludism. In persons over fifty years of age, suffering from erysipelas, albumin is invariably found, and it is almost always found in all cases.

In the above group of cases the albuminuria is supposed to be due to the intensity of the infective process, and it disappears after the temperature again becomes normal. In the scurvy of adults the urine is often albuminous; affections of the kidneys, too, are of frequent occurrence. The punctate hemorrhages, which occur in the substance of the bladder and kidneys, may give rise to albuminuria in purpuric diseases of the newborn; and it is often found in cases when the disease manifests itself in adults. In leukemia the urine presents no constant change, but albumin is found present in some cases. Severe anaemia also shows albumin in the urine very frequently; and here the urine is pale, and of low specific gravity,—one of the cardinal symptoms of chronic interstitial nephritis. In this group the albuminuria is said to be due to blood

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changes. Cases where the albumin is due to abnormal ingredients in the blood are jaundice, which if of great severity, or, of long duration, usually shows albumin in the urine. Diabetes mellitus is frequently attended by albuminous urine; according to one writer in nearly thirty-seven per cent. of all the cases coming under his observation albumin was found in the urine along with the sugar. Albumin is rare in diabetes insipidus, but it is found occasionally. Albumin is found in the urine of syphilitics. In cases of lead poisoning albumin and tube casts are found. In persons poisoned by mercury albumin is also found, and in ether and chloroform narcosis. After the ingestion of turpentine, cantharides, and carbolic acid albumin appears in the urine. Uric and oxalic acid and urea among the normal constituents of the blood, may induce albuminuria when eliminated in excess by the kidneys. Mechanical difficulties may bring about a condition manifested by the appearance of albumin in the urine. Thus, in diseases affecting the heart there are certain peripheral effects resulting in passive congestion of the kidney, and consequently the appearance of albuminuria. So, too, when the pregnant uterus or any abdominal tumor presses on the renal veins there is a consequent hyperaemia of the kidney which leads to albuminuria. Like results may be brought about by the damning of the blood in the right heart and from pulmonary affections. An appoplectic seizure may lead to appearance of albumin and tetanus is attended with albuminuria. Migraine and delirium tremens are two other conditions attended by the appearance of albumin in the urine. The urine is albuminous in exophthalmic goitre, in head injuries, and during epileptic convulsions. There is a form of functional albuminuria occurring in young persons, particularly boys, which makes its appearance after severe exercise, or a cold bath, or, often after eating certain kinds of food. The albumin may appear at noon or night, or early in the morning; on account of its intermittency this form is called cyclical, or, from a lack of evidence of disease, physiological albuminuria. Albumin in large amounts is found in acute nephritis. In chronic interstitial kidney disease it is occasionally present, and occasionally absent, at least, very hard to find. In chronic parenchymatous nephritis it is constantly present, and in large quantities. It is present in varying amounts in amyloid and fatty degenerations of the kidneys: and neoplasms of this organ give rise to it. In suppurative nephritis it is constantly present, and in good quantity. The urine is found mixed with albuminous material between the time at which it issues from the renal tubules, and the time at which it is voided from the bladder; such as pus, blood, chyle, lymph, etc. In both sexes albuminuria may be caused by inflammation of the ureters, "cystitis, urethritis—simple or gonorrheal —in men, by the presence of semen in the urethra; in women, by menstrual blood, vaginal discharges, and fistulous communications with an abscess, and the presence of semen in the vagina. Occasionally albumin is found in the urine of persons with movable kidney. Palpation of the kidney is frequently followed by the appearance of albumin in the urine; and it is found in hydronephrosis. A renal calculus, if it induce a suppurative pyelitis, can give rise to albuminuria. Tuberculosis of the kidney frequently causes the urine to become albuminous, and a cystic kidney is another source of albuminuria.

Under such varying conditions of health and disease, does albumin manifest itself in the urine, that it would seem to depend upon something always accompanying these conditions. The only one thing that could be reasonably supposed, under all circumstances, is a disturbance in the blood supply of the kidneys. This would account for the presence of albumin in the urine, and could be fairly presumed to exist in every one of these diseases. If this be true, then it follows that the renal epithelium has nothing to do with the transmission or retention of albumin, and that albuminuria is of no more diagnostic importance than is a coated tongue, or a heightened temperature.

Trepaning the Skull for Recent Traumatisms with Modern Instruments of To-day.*

By H. M. Wilder, M. D., Charlotte, N. C.

Trepaning the skull and other bones of the human body has been an operation resorted to for traumatisms and disease since the time of Hypocrates, Galen, Celsus and others of subsequent periods up to the present time. In a more or less modified form it is true in comparison to the operation as practiced by the more modern surgeons like Galt, Hey, Velpeau, Mott and the still more advanced surgeons of the present time throughout this entire country.

This operation has always been classed among the capital operations in surgery. Not on account of any difficulty in its technique, but on account of two potential dangers. The first from shock alone arising from the operative procedure, and the second from the liability of affecting the membranes covering the brain, viz., the dura mater and arachnoid membranes and thereby pro-

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ducing arachnitis and even infecting the brain substance itself, causing a cerebritis and acute softening of that most important organ, necessary to life itself. By the use of the very large and cumbersome Galt Trephines the foregoing evils were almost impossible to avoid, on account of the removal of unnecessary bony protection covering the brain, for it stands to reason that the greater amount of bone removed the greater will be the shock communicated to the brain which is so necessary to life and the greater liability of improving and infecting the extensive surface coverings of the brain with pathogenic micro-organisms that cause inflammation and the resulting evils following such exposure.

The present way of trepaning the cranium for traumatisms that crash in portions of the skull upon the brain and irritate and compress and interfere with the proper functions of that organ is to cut away all hair in the immediate neighborhood of the injury by means of a sharp pair of scissors and shave the surface of the scalp for at least 2½ to 3 inches from the center of the wound and then soap the surface well with etherial or green soap and clean away all debris, dandruff, and dirt, and then apply over the field of operation antiseptic gauze saturated with a 2000 solution of corrosine sublimate. This can be accomplished while the necessary sterilization of the instruments is going on. Then remove the bichloride gauze and wash the surface with sterilized water with liquid carbolic acid put in same, first mixing the carbolic acid in glycerine, making the strength of the wash to represent 1 part to 100 parts of glycerine and water. After this dry the surface of the scalp well with a sterilized cloth or towel, and then make the incision in the scalp in such manner as will effect the best drainage and secure the proper exposure of the impaired bone beneath the scalp. When the nature of the injured bone and other injuries to the coverings of the brain have been ascertained, as far as possible trephine the skull on the sound and firm side of the injured bone with the trephine of De Vilviss, which is only about three-eighths of an inch in diameter, which can be used after the manner of the Galt trephine of former days, and after the little opening has been made brush away all detritus with a brush and insert De Vilviss' one-tooth saw or chisel, which pushes the membranes of the brain out of the way and with the biting motion of the forceps-like arrangement, the skull can be cut away in any direction desired without removing any more of the bone than is necessary to the introduction of a lever for the raising of depressed bone or the introduction of forceps for the removal of detached and floating splinters of bone that are found beneath the injury.

By the use of these ingenious contrivances I am satisfied that the operation of trepaning the skull will in the future be accompanied with a great reduction in the mortality accompanying this capital operation. Erichsen, some 30 or 40 years since, put down the mortality from trepaning at 33 per cent. It is true that this statistical observation was made prior to the advent of "Listerism" and the bright prospects following this great asepsis and antiseptic period.

It is not the purpose of this paper to more than call attention to the fact that the De Vilviss trephine and other instruments are a decided advance in the removal of recently depressed bone from traumatism, over the Galt trephine, and it is not intended to convey the idea that the Galt trephine is to forever be relegated to obscurity, for it will never be the case, for there are certain operations upon the skull in which it will continue to be more serviceable even than the De Vilviss trephine in this field of diseased conditions of the cranial bones, &c.

Phototherapy.*

By Dr. T. M. Copple,—Rierson-Copple Sanitarium,—Winston-Salem, N. C.

In modern scientific medicine, light as a therapeutic agent, occupies a commanding position.

Light represents, along with air and water, a hygienic factor of the greatest importance. It is one of the elements without which there would be no life.

The botanist in his field of labor, is only too familiar with the beneficial effect of the rays of light. Without it there would be no coloring matter (chlorophyl) in his plants, no healthy growth. What is true in the vegetable kingdom is equally true in the animal kingdom and even more; it not only imparts health and life-giving influences, but it has the power of destroying germs.

Koch, perhaps, was one of the first to notice its destructive action on bacteria; he found in making cultures of the tubercle bacilli, that when exposed to sun light they were destroyed.

Other investigators observed that the growth of the typhoid bacillus was inhibited and that the plague bacillus was killed by the same agency. All bacteriologists concur in the fact that bacteria in general do not thrive in sun-light.

In 1870, Esmarch exposed his surgical instruments to the sun's rays for the pur-

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pose of disinfecting them.

Not only does light inhibit and destroy bacterial growth when cultures are exposed to it directly, but it acts as a *destroyer* to bacteria imbedded in the *tissues* of the *body*, and this at once gives us a fundamental platform for the utilization of the rays of light as a therapeutic agent. Prof. Niels R. Finson, a Danish scientist, in 1893 demonstrated to the world the effects of the rays of light as a therapeutic agent, he discovered that the different rays of the solar spectum—which is composed of red, yellow, orange, green, blue, indigo and violet in the order named, and more particularly the invisible rays which lie *beyond* the violet field, and therefore known as the ultra-violet rays—had a different effect on different diseased conditions. He observed that in the treatment of small pox those cases which were exposed to the white light, sometimes resulted unfavorably, while those that were exposed to the red rays of light recovered, without suppuration and cicatrization.

The violet and ultra-violet or chemical rays of the arc and incandescent light possess greater therapeutical properties than that of the sun. It has the superior advantage in that we can use it at any and all times and at any desired intensity; it also furnishes a greater abundance of violet and ultra violet rays which may be deficient in the sun-light under very many common atmospheric conditions of cold and moisture.

In 1880 Prof. Siemens discovered the peculiar effect of the chemical rays of the arc light on vegetation; he demonstrated that it favored the growth of plants, excited the formation of chlorophyl, hastened the ripening of fruits many weeks, and improved the size and flavor. It has been proven by other investigators that since it penetrates the skin and underlaying tissues, illuminating them and by its conversion into chemical and electrical irritating force, it modifies local und general metabolism, increasing the absorption of oxygen and eliminating carbon dioxide. By the use of these rays of light it has also been demonstrated that there is a decided increase in the number of red corpuscles of the blood, the effect being analygous to the increase of chlorophyl in plants under similar conditions; this means increase in haemoglobin which in itself constitutes a means of improvement in many forms of disease.

These rays have a peculiar effect on the vaso-motor nerves, causing a construction of blood vessels in the tissues exposed, a marked anaemia is thus produced which has a surprising pain-calming influence, thus the pains of pleurisy, cutaneous inflammation, contusions and swellings promptly disappear.

In one case under my observation a Pott's fracture of two days' duration with much swelling, pain and contusion, after 30 minutes' exposure to the Finsen light, the pain was relieved, swelling greatly reduced permitting a more thorough examination without pain to the patient. The chemical rays having anaesthetic as well as analgesic properties.

Prof. Minen reports making painless incisions and stitches after an exposure to these rays of light. On the account of these properties it is being used by dentists in reducing swellings and congestions about the face and rendering extraction of the teeth less painful.

The constriction of superficial blood vessels rapidly causes the absorption of infiltration about the edges of ulcers, and gives the impression that the ulcer is leveling itself and becomes smaller during each exposure. The ulceration is covered with a very thin membrane and becomes smaller. The edges of the ulcer are soon covered with skin of normal color and elasticity, and as these edges come nearer and nearer complete restitution of tissue soon takes place. Cicatrization does not pass through those phases ordinarily observed, because there is no development of connective tissue. It goes without saying that in specific ulcerations, the microbes which occasion them perish in the first place, and then only does restitution of the ulcerated tissue commence.

Report of Cases.

Case No. 1.—Mr. P., aged 35, telegraph operator and depot agent; ulcer just above ankle joint, size of 50c piece, ½ inch deep, duration three months, presented appearance of ordinary ulcer, pain, swelling, congestion, etc. About a year before had ulcer on same leg, above present one, which necessitated patient remaining in bed for four months before restitution took place. Began treatment with the chemical rays of light (Finsen light), August 22nd, 1905. After the first few treatments pain, swelling, etc., ceased, healthy granulations taking place, and discharged patient Sept. 9th, 1905, cured, after having given thirteen treatments; no return to present date.

Case No. 2.—Mrs. D., aged 46, weight 240 lbs. Ulcer just above ankle joint 6x2½ inches, ¾ inches deep, leg greatly swollen and painful. First appearance of ulcer twenty or twenty-five years ago. Had been healed one or more times but never had healthy, normal appearance, and at no time was larger than a silver dollar. Present status of ulcer began two years ago. Began treatment Dec. 18th, 1905, applied dry hot air, locally, for 30 minutes, reaching a maxi-

mum temperature of 250 deg. F., after which the chemical rays of light were used for 30 minutes, pain relieved and swelling greatly reduced after first treatment. The dry hot air was a valuable adjunct in this case, in reducing the swelling, relieving the pain and absorbing the connective tissue (of which there was a great deal, due to the long standing inflammatory condition). Daily treatments were given for one week, then three times a week. Treatment extended over a period of four months. Plastic stocking worn after ulcer healed.

Case No. 3.—Child five years of age. Eczema, covering very nearly the entire body, appeared when he was but two months old, intense itching, so much so that his hands had to be tied to prevent scratching himself and producing abrasions, numerous prescriptions had been used, besides the whole armamentarium of patent preparations. Began treatment with the chemical rays of light Jan. 16th, 1905; after two treatments itching ceased, skin soon became smooth and normal in appearance, and discharged patient Jan. 28th, 1905, cured, after having given six treatments. No return to date.

Case No. 3.—Mr. H., aged 52, laborer, septic infection patient came to the sanitarium one evening stating that he had stuck a nail in his foot three days before, and that he was suffering great pain, so much so that he had to quit work and was unable to sleep at night. Upon examination the foot and leg were found to be swollen and pus in the wound. Applied dry hot air locally, for 20 minutes, reaching a maximum temperature of 250 deg. F., after which the chemical rays of light were used for 20 minutes, pain was relieved and swelling reduced, evacuated the pus (which was done painlessly), and dressed the wound; patient walked out perfectly easy and had no further trouble. I think the dry hot air was a valuable adjunct in the treatment of this case.

Appendicitis from the View-Point of a General Practitioner.*

By Dr. E. L. Stamey, Greensboro, N. C.

Appendicitis is a subject often discussed by the surgeon, but seldom by the general practitioner. The latter, however, as well as the former, should be interested in this, one of the most important of all diseases. The general practitioner is the one who most often comes in contact with these cases, and upon whom, as a rule, rests the responsibility of first making a correct diagnosis. This fact, if recognized, would doubtless lead to a better understanding between the physician and the surgeon, and to a more rational and intelligent treatment of this disease.

The diagnosis of appendicitis in typical cases is comparatively easy. Pain and tenderness in the lower right abdomen, a moderate rise of temperature, nausea, and rigidity of the muscles, are symptoms that point unmistakably to the existence of the disease. Unfortunately, however, in this, as in other diseases, there are but few typical cases. Fever may be nearly, or altogether, absent. In one of my cases—that of my own little boy—fever was absent except at one time during the second attack, and then the rise was only one-half a degree. The operation was performed by Dr. J. W. Long, at the Greensboro Hospital, on the following day, and it was the opinion of the physicians present that the operation was none too early, since the appendix contained pus and a perforation had already begun.

In some cases the temperature may be high in the beginning of the attack and in two or three days subside almost completely, and the patient show signs of improvement. and yet the appendix be gangrenous, or full of pus. A few months ago I was called to see a young man who was complaining of great abdominal pain, with a high temperature, accelerated pulse, nausea to some extent, and all the characteristic symptoms of appendicitis. In forty-eight hours the temperature began to subside, was about gone, in fact, and the patient, as well as his father, who had come to see him, thought he was much better. I insisted on an operation, which was finally consented to, but with great reluctance. The operation was performed by Dr. Long at the Greensboro Hospital, and the appendix was gangrenous, rotten, and contained pus. His life was saved by not being deceived by a fall of temperature, and apparent improvement in his general condition.

We cite another case in point. A patient of mine, a boy twelve years old, had appendicitis, and notwithstanding the temperature was only ninety-nine on the third day of the attack when the operation was performed by Dr. J. E. Stokes, the disease had advanced so far the wound could not be closed and had to be left to heal by granulation.

We might speak of other cases of like nature, if we had the time and patience, but these are enough to illustrate the point that fever may be almost or entirely absent even in the worst cases of this dreaded disease.

Pain and tenderness, or both, are nearly, if not always, present but not always referred to the region of the appendix. On

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Christmas night I was called to see a young man, a druggist, who was complaining of pain in the stomach. As it was Christmas time I naturally thought he had eaten too much, and I at once ordered a dose of calomel and other remedies suitable in an attack of acute indigestion. But the next day my patient was no better, and on the third day there was for the first time some tenderness on pressure over the appendix, and the diagnosis of appendicitis was made. I advised an operation. In the meantime, three other physicians were called in. Two of them advised the patient to wait. One agreed with me, and we carried our point. This operation was performed by Dr. Long at the Greensboro Hospital, the diagnosis found correct, and the operation shown to be an absolute necessity.

Vomiting, though given as a characteristic symptom, is generally absent. In most of my cases remedies, as well as nourishment, have been well borne, and there has been but little, if any, nausea.

In the diagnosis of this disease the practitioner need not look every time for a typical case, but in many cases he must make up his diagnosis by taking into consideration all the facts before him, rather than any one symptom or group of symptoms. There is one consideration, however, in arriving at a correct diagnosis in this disease which should not be forgotten. It is one of the most frequent of all the diseases of its class. In making this statement, which will be disputed by some, we will not give a list of dry statistics, a thing we have tried to avoid in this paper. On the other hand, we appeal to the experience of those, whether physicians or surgeons, who have given to this subject any special attention.

The treatment of appendicitis consists of two steps: (1) Medicinal. The patient should be put to bed and given absolute rest. This is the first law of surgery, and in this case can be observed by the physician as well as the surgeon. You have an inflammation, and perhaps a suppuration at the most dangerous point in the whole human system, and it would seem that absolute rest is of the greatest importance. To this end all food should be withheld, and the patient given nothing but water. Purgatives, even simple laxatives, are to be withheld. The intestines should be kept at rest rather than increase peristaltic action. If the pain is severe, a hypodermic of morphine should be given, and this is about all the medicine the writer ever gives.

(2) The next step in the treatment of this disease belongs to the field of surgery. Every case of appendicitis is an operative case, and the sooner we call to our assistance the services of the surgeon the safer it will be for our patient. In making this assertion, I am aware that some, if not many cases, get well without any aid whatever, but they are certain to return. The sun will shine for only awhile, and then the black and angry cloud will rise again and the storm burst forth in all its fury, and each succeeding storm will be greater than the one gone before. The time will come when, if death does not intervene, an operation will be advised, but then it will, perhaps, be too late. Every one who has had much experience with these cases knows that if operated on in time and that by a competent surgeon, most cases of appendicitis get well. But if neglected, every hour makes the operation more difficult and dangerous to the life of the patient.

I do not sympathize with the so-called "interval operations." As Kelly says, "The interval operation is not for the acute case, but for the case that comes to the surgeon during the interval." If I could place my patient in a well regulated hospital, where he or she could be watched every hour in the day, I might be willing for a more favorable opportunity to arrive, and have my patient operated on after the fever, pain and tenderness had subsided. But that favorable time might never come, and in every one of these cases I feel that now is the "acceptable time." I cannot feel easy until the surgeon has had his turn. A great deal has been written in the local newspapers, and by others ignorant about these things, criticising the surgeon's knife and advising mush poultices, epsom salts and everything else, from antiphlogistine to packing the patient in cold storage. But in my opinion when we, as a profession, recognize the great importance of early operation in appendicitis many more lives will be saved from the insidious stroke of this awful disease. I have had many cases operated on, and in every case, when the operation was performed in time, the patient has done well. In other cases, when the operation was delayed, the result has been different.

Four years ago I was called to see a young man who gave a history of having had, three months before, what was diagnosed by the attending physician as "acute indigestion." The patient was in Richmond at the time he had the so-called indigestion. The next day he was able to go about his work. Two months later he had another attack, but it was so slight that he did not call a physician. When I was called to see him he was suffering with great pain in the abdomen. It was the first Sunday in April. That evening the patient spent at one of the hotels with some friends. He went home, kissed his mother good-night, and retired at 10 o'clock in apparent good health. My

visit, which was made four hours later, and immediately after the attack, was my first to that patient, and soon convinced me that I had to deal with a ruptured appendix. I sent him to the Whitehead-Stokes Sanitarium at Salisbury, the nearest hospital to me at that time. The operation was performed by Dr. Stokes as soon as possible, but the peritoneal cavity was already infected with pus, and, as the surgeon had feared before the operation was performed, the case was a hopeless one. We gave him the only chance he had, but it was too late. How different the result might have been if the operation had been performed sooner. In January was the first warning, in March was the second, the third came in April, but it was then too late. My opinion is that the so-called acute indigestion that the young man had three months previous was an attack of acute appendicitis, and that pus had been present in the appendix all the while. The rupture was simply a delayed sequence and could have been prevented, and the boy's life spared if in time the warning had been heeded and the appendix removed.

A few weeks before the above experience I was called to see an excellent woman. Her home was in England, but at this time she was visiting in this country, being a prominent minister in the Friends' Church. She had preached on Sunday morning and seemed in good health. That night she was seized with sudden pain in the abdomen, and I was called to see her. The pain was so great that I had to give her a hypodermic of morphine. The muscles were rigid, the temperature high, and there was nausea and vomiting. I called in consultation Dr. Stokes, and as soon as possible the patient was removed to the Whitehead-Stokes Sanitarium where an operation was performed, only to find the abdomen full of pus and the patient beyond hope. This good woman gave a history of perityphlitis twenty-five years before, and it is my opinion that at the time she preached her sermon on that Sunday morning, and, perhaps, for days before, there was a cavity of pus in the abdomen, which had simply ruptured at the time of my first visit. Twenty-five years before she had the first attack, and all that time she had carried with her a diseased appendix which at last caused her death.

Many other cases where the operation was delayed might, of his own personal knowledge, be cited by the writer as illustrating the danger of procrastination in this disease, but these are sufficient at this time. On the other hand, as I have already intimated, all of the cases that I have had operated on before the disease had advanced too far, have done well and made uninterrupted recoveries. Within the last few weeks Dr. Long operated on a case for me at the St. Leo's hospital, and in five days my patient was able to sit up, and in one week she returned to her home. This case is illustrative of many others I might mention.

And now, gentlemen, if what I have written should prove a stimulus to even one general practitioner in the early recognition and rational treatment of appendicitis, I shall feel more than repaid for any trouble I have had in the preparation of this paper. This is the only object sought and the only compliment asked.

Unjustifiable Negligence in the Diagnosis of Pulmonary Tuberculosis.*

By M. Eugene Street, M. D., Glendon, N. C.

One of the most important duties of the physician to his patient, to his State and to humanity, is the early diagnosis of pulmonary tuberculosis, and, strange as it may seem to say so, it is one of the most neglected. And this negligence is unjustifiable. It is only one step further to go to say that it is criminal. Enthusiasts and imposters have, however, in all the history of medicine brought forth so many false theories, and claimed to have discovered so much that proved to be mistakes, that the body of medical men necessarily have to be the most ultra conservative body of working scientists. For this cause no new discovery can be generally accepted and put into operation by physicians, unless it be one that is easily demonstrable. So, too, deeply rooted opinions and theories cannot be easily eradicated—and especially is this true when such opinions and theories are very nearly in accordance with the truth. Then we will not say yet that it is criminal to fail to make an early diagnosis of pulmonary tuberculosis. But in the light of present knowledge failure to do so is unjustifiable, and it does not require a prophet to see that shortly such negligence will be regarded as criminal.

Before the cause and true nature of tuberculosis was definitely known the physician was excusable for failure to interpret and appreciate the significance and importance of the early manifestations of the disease. Now, when that knowledge is supplied and it is known that the control of the disease and the curability of the case depends upon properly directed treatment instituted in the incipiency—when the tremendous importance of an early diagnosis is known—it is incompatible with reason and justice to relieve the physician from the responsibility of negligence to perform a duty so

*Read before the North Carolina Medical Society at Charlotte.

important and so clearly required of him.

Consumption has always been regarded as an incurable malady and physicians have not concerned themselves about what they had a preconceived idea could not be remedied. This is the cause of the general neglect of tuberculosis. And, when it comes to dealing with the advanced case, this idea is about correct. And persistent attempts to cure advanced consumption have resulted in discouragement to the conscientious physician, and the general belief by the people that tuberculosis is incurable. This is unfortunate but true. The fact that we want both the physician and the laity to recognize is that pulmonary tuberculosis is curable at the beginning.

It is little use, so far as a house is concerned, to call out the fire department after it is filled with fire and half burned down. So, too, it is little use to institute treatment for consumption after the lungs are filled with tubercles, and are half destroyed. But it is an easy matter to quench the first little blaze in the building, and a comparatively easy thing to arrest incipient tuberculosis in the lungs. It is the watchman's duty to be on the lookout for fire. The physician is the watchman who should be on the lookout for tuberculosis. Neglect of the advanced case of consumption is no more to be thought of than neglect of a burning building in a city. The fire department protects other buildings from the flames, and from the sparks that are scattered far and wide. Proper treatment of the consumptive not only makes life more comfortable while it lasts, but protects others from the myriads of tubercle bacilli that are coughed out and scattered far and wide.

Detailed directions for making a diagnosis of incipient pulmonary tuberculosis cannot be gone into in a paper like this. Suffice it to say that it requires a knowledge of the general principles of medicine, anatomy, physiology, pathology and physics and a careful physical examination of the chest and ability to correctly interpret all the finding. One thing I should like to say right here, however, is this: it is impossible to make a satisfactory examination of the lungs unless the chest is bared. I mention this because some young women who were, years ago, patients of mine, are in their graves, probably, because this was neglected. They, very naturally, objected and I did not insist that the chest be bared. When the diagnosis of pulmonary tuberculosis was positively made the advanced state of the disease was beyond remedy. Now I insist upon a bared chest in all cases and I would as soon guess at the color of peas through a thick bag whether white, yellow or black-eyed, as to guess through any clothing whether there was any primary tubercular lesions in the lungs.

Who can tell how far toward absolute control of tuberculosis we should be if every new case were recognized in its incipiency, and properly treated? It is the advanced case that is a walking pestilence and a menace to friends and community. It is the advanced and not the early case that spreads infection everywhere.

We have discussions without end in regard to the control of tuberculosis. It is possible to do it, but it is a fact that should be clear to all that the only way it will ever be done is by the early diagnosis and proper management of all new cases as the first and most important thing to do, and then, the proper management of all advanced cases. In less than a decade there would be a greatly lessened number of new cases to be dealt with. By the early diagnosis, and the institution of proper treatment there would be a far less number of those cases that would reach the advanced and infectious stage, and as the infection was lessened there would be fewer and fewer new cases, and less danger of infection and re-infection, and we should see the beginning of the passing of the great white plague, which claims its victims by the hundreds of thousands in our country every year.

Is not this sufficient reason why the medical profession should become aroused, and interest itself in a duty so long almost absolutely neglected? Is not this a sufficient reason why the profession should urge all necessary State regulation in regard to tuberculosis? Would it not be in the right direction for our State Society to insist that hereafter every candidate making application for license to practice medicine in this State should be required to satisfactorily demonstrate the ability to diagnose the earliest signs of pulmonary tuberculosis? Would it not be a good thing if some Supreme Court Judges who undertake to define and regulate the practice of medicine, and who know as little about such things as they care about the welfare of the people, would amend some opinions handed down, which allows an army of incompetents and imposters to prey upon the credulity and ignorance of the people?

It is high time the Medical Colleges, the text-book writers, the medical profession and the people give to the early diagnosis of pulmonary tuberculosis the attention its importance demands.

No physician, regardless of standing or success, can afford to neglect the early diagnosis of tuberculosis; to do so is to abuse the confidence reposed in you, and conscience and self-respect are alike outraged.

1. Consumption is an infectious disease.

2. At the commencement of the disease consumption is curable.

3. It is the physician's duty to diagnose consumption while it is curable.

4. The physician who fails to make a diagnosis during the earliest stages is guilty of unjustifiable neglect.

5. The medical profession should no longer neglect a subject of such vast importance as the early diagnosis of pulmonary tuberculosis.

6. The people should be taught the necessity of an early diagnosis of consumption; an early diagnosis means a chance for recovery, a late diagnosis means death.

7. On account of the great prevalence of tuberculosis, and the incalculable importance of an early diagnosis, and the general neglect of the subject of an early diagnosis by the text-book authors, the Medical Colleges and the medical profession, the State Board of Examiners should require every candidate for license to practice medicine to pass, in addition to all other requirements, a satisfactory examination on the symptoms and evidence of early tuberculosis involvement of the lungs.

Report of Two Freaks of Nature.*

By G. E. Flowers, M. D., Granite Falls, N. C.

Gentlemen of the Fraternity:—

Not being accustomed to writing for the public or even speaking to an audience, you will excuse the brevity of a report that I wish to read of two remarkable freaks of nature, or deviations from the ordinary circumstances. I have been practicing medicine about twenty years, and my work has largely run into an extensive obstetric line, and these I met in my personal work. About four years ago, I was called to the bed-side of a robust white single woman. I found her in the last stage of labor, and while hasty preparations were being made by me, to get ready to deliver her, she seemed to be very anxious to see her baby, assuring me that she was afraid that it would be dark-skinned, as she said that she had been badly frightened by a black cow some months before. Everything ready, I delivered her of a white baby girl. in all appearance an eight months' child. Handing this over to a woman attendant, and she calling me back in haste to her, I very soon delivered her of a full term genuine mulatto boy, which, by the way, was much darker than the average. Possibly some brother will say, "Oh, that was a mother mark," but, gentlemen, it has been my misfortune to deliver quite a number of mulatto babies, and this was one which I recognized by its wooly hair, bow-legs, straight feet, and the general features of its parentage. My belief is (and I am borne out in it by after knowledge) that the dark baby was one by a colored man with whom she lived at the Catawba Springs nine months prior to their birth. Hence her fear that it would be dark-skinned. And that as she menstruated one month later and was then living with a white man, that he is the father of the other, and that one month elapsed between those conceptions. I am truly sorry that those babies were born in a cool spell in the Spring, and died in from eight to fifteen hours, not being properly cared for, and being quite unwelcome on the mother's side. But so anxious was I for them to live that I begged the attendant for some old woolen rags and pieces of shawls (the best they had), built a fire, wrapped them as best I could, and left them on the hearth breathing nicely.

The other freak was found in a married lady, she weighing near three hundred pounds, and consists of a complete vaginal septum, or upright partition. This woman, whom I will call Mrs. H., was in her first confinement, had been married eight years, and was thirty-four years old.

In my first examination, I found, that to enter the os uteri, I was compelled to press some membrane out of my way to the right side, which gave quite a degree of resistance, and I noticed that it gave this resistance to the vulva, externally. On my next examination, which I usually make in an hour or two, I found like conditions, but to the opposite side. When and whereupon I made a careful digital and ocular examination, and my finding was a complete upright partition of the vaginal orifice, feeling between my fingers, or finger and thumb, to be about the thickness of ordinary upper leather, or near the sixteenth of an inch, and being attached to the floor and roof of the passage.

As labor advanced, the os was easier reached by the right entrance, and as it progressed, the occiput entered this road to the world, and with the exception of a long, tedious labor, it was natural, which features we can attribute to her age, and other existing circumstances. Nevertheless this apparent blockading, this membrane dilated as did the other parts, and she was happily delivered of an ordinary girl baby without the least abrasion or laceration. Did any member of the fraternity ever meet a similar circumstance?

*Read before the N. C. Medical Society at Charlotte May 31, 1906.

Serum Therapy.*

By T. G. Hamrick, M. D., Caroleen, N. C.

It will be impossible to enter into a thorough discussion of the principles upon which serum therapy depends, in the short space of time allotted me on this occasion. But they must be kept clearly in mind in any discussion, as to the value of the method. Therefore I will review, briefly, the results of the researches of some of the most popular scientists on the subject.

Antitoxic therapy, as Behring says, is that by means of which we endeavor to combat those infectious diseases which we know are caused by the poison of micro-parasites. The antitoxins have, as yet, only been found in the blood of immunized animals. Each antitoxin exerts a curative influence or action only against the disease product corresponding to it. Antitoxic therapy is, therefore, in the highest degree specific therapy.

Just what the antitoxin is, we have not been able to learn, further than that it is a soluble substance, and when in excess of the toxin renders the latter inert.

Ronx states that it cannot be derived from the toxin, because an animal can be bled to the extent of the total amount of its blood, without appreciably diminishing the antitoxin. He explains it by the theory that the toxin acts as a stimulant to the cells, causing them to secrete the antitoxin.

Behring considers the antitoxin to be the product of the reactional albumin of the living cells, which is acted upon by the specific, under circumstances that point to a general disturbance of the regulating apparatus of the system. When an infection is survived the amount of the antitoxin produced is more than enough to neutralize the toxin. This excess of antitoxin is found in the blood and can be used to aid other individuals in overcoming the same infection. Upon this one point, namely, the excess of antitoxin in the blood serum, rests blood serum therapy.

Diphtheria lends itself, perhaps more easily than any other of the infectious diseases, to this mode of treatment, because of its purely local origin. Abbot says the disease is not a septicemia in the sense of being associated with a distribution throughout the body of the microorganism, causing it, but is strictly a toxemia primarily, though a septic condition may be engrafted later.

It has been found by experiment that an animal furnishes a serum, the antitoxin properties of which are stronger in proportion to its sensitiveness to the toxin. Hence the horse is chosen as the best animal for obtaining serum. Also, horse serum, even in large doses, is not harmful to man. It has been observed further, that serum containing antitoxin, when mixed with cultures containing toxin renders the latter inert; an injection of the mixture into an animal produces no results. If the toxin and antitoxin are injected separately, but at the same time, no effect is produced; and the same result is obtained if the antitoxin is given first. If the toxin is given first the quantity of the antitoxin must be increased in proportion to the interval. So as to be successful in combating disease with antitoxin we must regulate or increase the dose, according to the time the disease has been operating on the system.

If the natural resources of the cells in the body, being stimulated by the toxin, are sufficient to produce an excess of the antitoxin, the body needs no assistance in overcoming the infection; but we never know this until it is too late for us to accomplish any good in trying to aid nature to overcome the difficulty.

In view of the fact that an excess of the antitoxin is not harmful it is our duty to supply the needed amount at the time or even before the infection sets in, if within our power to do so.

The value of the antidiptheric serum, both as curative agent and prophylaxis, cannot be measured by dollars and cents. We have reports from many experimentalists stating that the injection of very small doses of antidiptheritic serum, viz., 100 to 500 units, repeated every three or four weeks, will act as a prophylaxis under constant exposure to the contagion. One experimentalist reports nearly 1500 cases, in which the injection of from 100 to 500 units, and repeated every three weeks, and at the same time being exposed daily, only two cases of diphtheria developed. A number of others report equally favorable results. One attack of diphtheria does not immune its subject from another attack but for a comparatively short time; therefore, it is necessary to repeat the injection as often as exposed, after the lapse of three or four weeks' time from each previous dose.

There are a number of the contagious and infectious diseases, such as measles, whooping cough, scarlet fever, etc., which one attack immunes against another for life, and I have no doubt but that the time is coming when there will be a serum produced that will immune against each of these diseases respectively. Serum is now being used to a certain extent in many of the hospitals in cities and large towns, in the treatment of tetanus, tuberculosis, cholera, snake venom, etc., with some successes and some failures—the failures not due, perhaps, to

*Read before the recent meeting of the North Carolina Medical Society at Charlotte, N. C., May 29, 1906.

principle, but to the mode of obtaining the serum and its administration.

There has never been a remedy introduced that has been so unanimously endorsed by the medical profession as the antidiphtheritic serum. Since it has come into use the prognosis of the dreaded disease is much more favorable, the mortality being reduced nearly 50% at every point.

The dose, as has been previously intimated, is very important in the successful use of the remedy. In all therapeutics we hear the adage, "It is better to give too little than too much," but in this instance it is the reverse—it is better to give too much than too little.

It is stated by good authority that 5,000 to 10,000 units of antidiphtheritic serum may be given with less untoward effects than smaller doses. Many investigators claim that the use of the antidiphtheritic serum in croupous laryngitis is attended with equally as good results as in diphtheria. I have not found it so in my limited experience. I have used serum in eight cases of diphtheria and three cases of membranous croup, with results as follows:

Case 1.—Age, 2½ years, well grown male child. I was called in second or third day of the disease. The tonsils were covered with diphtheritic membrane, the posterior nares and uvula were also involved. The serum not being very well known at that time, the parents objected to its use at first, but on my fourth visit they consented, so a dose of 2,000 units was promptly injected. On the following day there was some improvement, the temperature had dropped about one degree, but on the second day I decided to use another dose of 1500 units, after which the improvement was very satisfactory, and the patient was soon dismissed as cured.

Case 2 was a little girl about three years old, had been complaining for two or three days before I was sent for. On examining throat found tonsils covered with membrane, nasal mucous membrane considerably involved. 2000 units of serum used—in 24 hours 1500 units more were given. In 48 hours a third dose of 1000 units was administered, after which there was marked improvement and the child soon recovered.

Case 3.—Aged 2½ years, female. Had been sick several days before I saw it—diagnosis diphtheria. I was not permitted to use antitoxin until two days later, when 2000 units were given. On the following day improvement was quite marked, and it was considered unnecessary to repeat the dose, and the case was dismissed in about one week. Two weeks later she died suddenly with paralysis.

Case 4.—Age two years. Was called late in the afternoon. Child had been up all day, but quite irritable. On examining the throat found some indications of diphtheria, but not marked. On the following morning diagnosis of diphtheria was made, and 2000 units of antitoxin were used with excellent results.

The other four cases were treated in the same way and yielded very nicely to the remedy, and no unpleasant after effects resulted in any of them.

I regret to say that I did not have success in my laryngeal cases.

Case 1.—Age one year, male. I did not see the child until it had been sick for several days. When first called the child was gasping for breath and fearfully scianosed. Serum treatment, intubation, and calomel fumigation were resorted to. After tube was first introduced there was decided relief for a few hours. In a short time, however, the tube became clogged. It was then removed, cleaned, and re introduced, but with no marked relief, and the child died one hour later.

Case 2.—Had been suffering from cold, for several days. On finding the larynx involved the ordinary treatment for laryngitis was given. On second day I found the child growing worse, so I gave a dose of 2000 units antidiphtheritic serum. There was some apparent improvement for a very short time, but soon grew worse. Two other doses of serum—1500 and 1000 units—were given at intervals of 24 hours, with no results. As a last resort tracheotomy was undertaken, but the child died before the operation was complete.

Case 3.—Aged 2½ years. Had been somewhat ill for several days prior to my first visit, at which time it could not cry loud enough to be heard from one room to another, but its breathing was not exceedingly difficult—it could walk around in the room. The serum treatment was followed out as in the preceding case, except the doses were given at shorter intervals. Death occurred in 12 hours after the last dose was given. The treatment was begun rather late in all three of these cases, and in every particular they were unfavorable cases. The failure might have been on account of insufficient dose, with too long intervals between. However, I am not discouraged with it, and shall continue the use of serum until I find something better for such cases.

I have used the antituberculous serum, manufactured by P. D. & Co., in five cases, which proved very helpful in two of the cases; very little, if any, benefit in the other three cases.

In conclusion, I want to urge the laity of the profession to encourage the continuation of the researches of the subject, with

the hope that we may enjoy the benefits of a number of other serums as we have the antidiphtheritic.

The Cause and Treatment of Ununited Fractures.*

By S. E. Greenwood, M. D., Fletcher, N. C.

The term ununited fractures is used to designate that class of fractures in which bony union has not taken place, after the lapse of the period of time usually necessary for such repair. This period of time varies with the age of the injured and the character of the injury. It is not the intent of this paper to discuss any special fractures, but to speak in general terms of ununited fractures, as they usually present themselves to the active practitioner.

Let us notice briefly the time required for the different changes in the process of repair. These are set forth in the general rule of fractures:

From the 1st to the 5th day inflammation.

From the 5th to the 10th day comparative inactivity—inflammation subsides.

From the 10th to the 21st day exudation of callus.

From the 3rd to the 8th week ossification.

If the mobility continues after this period the case is termed one of ununited fracture. The cause may either be general or local, or both. The local causes are failure of adjustment, or improper adjustment, of the fracture; failure of immobilization; disease of the bone; impaired circulation and defective innervation. Of these the first is the more frequent cause. Not infrequently do the periosteum, muscles, tendons, nerves and arteries become engaged in the line of fracture. These, if allowed to remain, will prevent the proper apposition. Likewise, the bone may be comminuted, and a part of the bone may be lost, thereby leaving a space between the ends of the broken bone. Again, the break may be of the mortis and tenon variety, and render perfect apposition of simple fractures almost impossible. Compound fractures, or fractures of bones located just beneath the skin, may be more easily reduced. Even oblique fractures may be difficult to reduce properly.

The cause next in frequency is the failure to immobilize the parts. It is sometimes difficult to prevent lateral motion in fractures near the ends of bones, or in special regions, but the most difficult to immobilize is the oblique fracture, surrounded by strong muscles, which have received serious injury, and keep up constant motion. Necrosis, rarification, and similar conditions are other local causes for failure of union. Rarification is a condition seldom found. When found, it usually follows serious injury to the blood supply of the bone, or a former fracture of the same bone, and within the first three years, the time usually necessary for the formation of new medullary and Haversian canals in the line of the old fracture.

Defective innervation is another cause not frequently present. In this the origin may be centric or local, or in the nerve track between these points. It is the writer's opinion that the two last named are extremely rare, if ever present. Impaired circulation is a cause more frequently found. This is especially true where the soft tissues are badly injured. The nutrient arteries may be, and often are, injured, but this is seldom the cause of failure of union. A more frequent cause is the pressure due to swelling and tight dressings. The general, or constitutional, causes of ununited fractures are much less frequent than the local causes. Constitutional conditions, however, do undoubtedly hinder or prevent union. Syphilis, pregnancy, rickets, osteomalacia, malnutrition, and acute diseases are the most frequent of them. Syphilis does not necessarily prevent union. Fractures have united in every stage of this disease, yet cases have been found in which the cause of delay, or failure of union, have been due to syphilis. Constitutional conditions more frequently interfere with union by the arrest of the reparative processes than otherwise. In all fractures there is hemorrhage from the surfaces of the broken bone, and from the injured soft tissues. This blood remains about the seat of the injury in all except compound fractures. Even in these some blood usually remains. A large quantity of blood does not necessarily prevent union. Much of the blood is absorbed, but some remains and is probably converted into callus. This reparative process may be suspended at any stage of its evolution As a result of this we have cartilaginous, or membranous, union, and pseudo arthrosis. Likewise, constitutional disorders may break and destroy the union, which has previously formed. Nature, however, does sometimes go to the other extreme, and bridge over a considerable space, converting intervening muscles, tendons, and organized blood clots into callus.

The treatment of ununited fractures depends upon the cause. If it be due to an acute disease, union will follow recovery from that disease. If to syphilis union will progress as the disease yields to the antisyphilitic treatment. If to pregnancy, repair may be expected to follow confinement. If to general debility, union may best be

*Read before the North Carolina Medical Society at Charlotte, N. C.

accomplished by the proper treatment of the constitutional disorder. If this treatment brings about union in a reasonable period of time the case may be termed one of delayed union, in contra-distinction to non-union, the term used to designate those fractures which do not yield so readily to treatment. It is not possible to determine the cause of failure of union in every fracture, or if it be general or local, without the use of the Roentgen ray. This will usually show the local cause, if one exists. Having determined the cause to be local in character, we should employ the simplest and safest treatment applicable to that particular case. Many devices and operations have been employed in the effort to obtain union in these cases. The history of these will not be given here. If the X-ray shows the ends of the bones in apposition, and the primary treatment has been such as has been out-lined above, the simplest procedure is to excite a local inflammation by irritation of the broken ends of bone. This may be accomplished by forcibly rubbing the ends of the bones together. If it is desirable to have a considerable degree of inflammation in the surrounding tissues this may best be produced by forcible flexion of the bones at the point of fracture. This procedure is, of course, inapplicable where there are two bones, the second being intact. It may not be admissible on account of important structures in close relation to the injury. If callus has been provided, but the evolution has been arrested before ossification, a milder irritation may be sufficient. Striking upon the end of the extremity or placing some weight upon the limb is all that may be required in some cases. In employing this treatment care must be taken that the application be made only when the limb and bones are in proper alignment. After an acute inflammation has been established the treatment is the same as for recent fractures. If it is determined, however, that a considerable amount of membranous tissue is separating the broken ends, or if pseudo-arthrosis exists, operative treatment should be employed.

Careful preparation should be made and thorough asepsis should be practiced in every detail. The ends of the broken bone should be exposed, all intervening substance removed, and the ends brought into close apposition. If the fracture be transverse, or nearly so, both broken surfaces should be thoroughly curetted. If the break be oblique, or very irregular, resection of one or both ends should be done. End-to-end apposition with the normal relation of the medullary canal and outer plane should be secured if practicable. It is not necessary that the whole of the bone be thus apposed, but it is best to have as great surface as can be obtained without too great loss of bone. Many devices have been employed to retain the position of the bone. Silk, chromicized catgut, silk-worm gut, and silver wire may be employed for this purpose. Probably the best is the silver wire suture. One or more of these should be introduced in such manner as to hold the bones in perfect apposition. The hole for the wire may be made with any suitable bone drill, and should not be placed too close to the end. The twisted end of the suture should be left close to the bone, with the ends toward the bone rather than the soft tissues. No excessive quantity of blood should be permitted to remain in the wound. The periosteum should be brought together and the wound closed without drainage. The after treatment of the limb should be the same as for the compound fracture. The time required for repair is greater than for the usual compound fracture.

Pernicious Vomiting of Pregnacy.*

By J. W. Wood, M. D., Shelby, N. C.

The dividing lines between the physiological vomiting of pregnancy, which occurs in the majority of cases, and the pernicious form with its attendant mortality of between 30 and 60 per cent. is not definitely fixed. Indeed, the matter seems to be more of a matter of degree than of variance in disorder. No diagnostician, when first a pregnant woman begins to vomit, can say positively that it will prove to be merely physiological, or will develop into a pathological condition. Even in cases where the pathological condition is undisputed, authorities differ as to the etiology of the affection. This is not strange when we consider that any explanation involves a demonstration of the condition and stability of the nerve centers, and also of the degree and cause of the periphera irritation. Some declare the condition to be the result of the reflex stomachic irritation, consequent upon the excitability of the sympathetics induced by the enlarging uterus walls. Others are emphatic in their assertion that an autotoxemia underlies the severe symptoms, and cite the beneficial results which often follow treatment directed towards a betterment of such conditions as proof. The basis of diagnosis, we believe, must rest upon a determination as to whether the vomiting intermediately related is entirely consequent upon the pregnant condition or whether the vomiting is independent of the pregnant condition or but slightly related to it.

*Read before the North Carolina Medical Society at Charlotte, N. C.

Since, it is not possible, clinically, to separate vomiting in the pregnant state into two varieties, much of the treatment which burdens the text-books may be considered useless, because most of it is specifically commended for one or the other variety. The whole object of any and all "Methods of Treatment" may be summed into the following few words: Exclude existence of complications; remove sources of peripheral irritation; lessen irritability of the nerve centers. Such a view of the matter must impress upon anyone the comparative uselessness of many drugs and methods advised.

No routine treatment can be advised for any case. Every attempt at alleviation must consider the inclusion of dietetic, hygienic, medical and surgical measures. It is very important, in view of the high mortality attending severe cases, that the surgical features are not kept too long in the background. The life of the mother, by all values estimated by man, is of more importance than the life of the fetus; yet if operative interference be too long delayed, the maternal life is jeopardized and both lives may pay forfeit to the temporizing.

The dietetic treatment includes the exclusion of the unsuitable articles of food, and, in some cases, rectal alimentation. An absolute diet, permitting water only, and covering a period of one to seven days, at the outset of any severe case, may do much good.

Rectal feeding is seldom well borne, often provoking a severe diarrhea, which is more exhausting than any deprivation of food could be. In the milder case, benefit often follows a light lunch of a cracker, toast and tea or milk just after wakening and before raising from the pillow, the patient lying flat on the back for 15 to 20 minutes afterwards before making any effort to rise.

The hygienic efforts include absolute cleanliness at all times, lavage of the bowels and in occasional cases, of the stomach, a mild electrical current, applied over the neck and epigastrium and in the worst cases, confinement to bed in a quiet and darkened room. It is a peculiar fact that moral control over the patient has often a salubrious effect; the emphatic assertion that a certain medicine will stop the vomiting often resulting in a complete cessation.

Even a vaginal examination, accompanied by elaborate preparations and precautions, is in many cases sufficient to produce a decided beneficial effect on the symptoms. Due attention is paid, of course, to the emunctories.

In the way of medicinal treatment, it is enough to say that drugs except those which aid in maintaining perfect functional activity of the skin, kidneys and bowels, or which aid in elimination or lessening of irritation, are frequently useless.

Spraying the faeces with a weak cocaine solution before food often prevents the vomiting in mild cases. As a rule the unexperienced practician addresses his efforts along the line of drug therapy to the stomach, and this is "beginning at the wrong end of the trouble,—a fact attested by the interminable lists of drugs given in the books and handed down through force of habit."

If the irritation in the stomach proceeds to development; if a true gastric catarrh, the drug stricture is removed, for it is then necessary to treat the catarrhal condition. Any complication, as, for instance, nephritis, may, at once, render the use of drugs imperative; it is the uncomplicated, severe cases which seldom close well under drugs alone.

The surgical treatment, ordinarily, is understood to refer to the induction of abortion, but we think it preferable to include all manual intervention. This would include typical applications to diseased cervix or os uteri; depletion of nabothian cysts by puncture, insertion of vaginal tampons when necessary, replacing of a displaced return, and when necessary, the insertion of a pessary to maintain the proper position, and in severe cases, dilation of the cervix, though it is to be remembered that this often results in the induction of an abortion. Finally, if emaciation becomes extreme, or if feeble pulse indicates flagging heart power, or if epigastric pain is not reliable, or if the vomited matter becomes "coffee ground" in character, and if the eliminating of urea sinks to a low ebb then abortion must be induced to save the mother's life.

Abortion should never be undertaken without a consultation of several brothers in practice and should be delayed until the symptoms above outlined warn that no further temporizing will be tolerated by an exhausted system, and yet it must be undertaken while the mother possesses a sufficient reserve strength and vitality to stand the operation itself and to rally afterwards. Probably few other emergencies arise in practice where cooler heads and more mature judgment are in such great demand.

A Plea for More Frequent Autopsies in Private Practice.*

By Dr. J. P. Munroe, Davidson, N. C.

Not long since a medical friend of mine, who does quite a good deal of surgery, closed an account of a very interesting case

*Read before the North Carolina Medical Society, Charlotte, N. C.

by saying, "But we sewed him up and had to let him die without knowing the cause of his death." I asked, "Did you find out the cause afterwards"? His reply was, "No, an autopsy was not held."

The frequent occurrence of cases of this kind was doubtless what our Secretary had in mind when he asked me to present a paper on the subject I have announced. I was more than glad to do so, because within the last few years, I have been more impressed than ever before with the value to all parties concerned of more frequent autopsies than are now held.

Pathology has assumed an importance never before held in the schedules of medical education. Some one has said that it is not unfair to the other departments of the Medical School to say that the work of the pathologic department is the most important work in any one department of the medical course. As conducted in the larger institutions pathology is taken up in the second year of the course, and continued in one form or other throughout the remainder of the curiculum covering the last three years. In these institutions, and in the hospitals connected therewith, it is the rule with, of course, occasional exceptions, to require a postmortem in case of every death. These postmortems furnish the material for study. The points of fundamental importance at the postmortem are: First, to confirm or disaffirm the diagnosis made before death. Second, to gain information that will make the diagnosis of similar cases easier and more definite in the future. Third, to increase our knowledge of the diseased condition of the body.

With these ends in view, and bearing in mind the history of the case with the symptoms that were presented, a careful examination of the body is made, and all the important organs examined with reference to gross lesions that may be apparent to the naked eye; and in addition to this, separating and preserving portions of diseased tissue for future examination under the microscope.

To demonstrate pathology successfully, one should be able not only to show the morbid changes in the tissues, but also to trace the connection between these changes and the symptoms or morbid physiology as presented during life. The higher aim of postmortems and the studies in pathology based thereon is to place the physician in that position where when certain symptoms are presented to his eye, to his touch and to his ear, he can so interpret them as to see with the mind's eye the morbid changes that have taken place in the diseased tissues and organs.

It will be universally admitted that all this is of fundamental importance in a well-conducted medical school, but the point that I wish to make is: that in private practice we deprive ourselves of much that is helpful in not pursuing studies along the same line. It may not often be the case that we will be called upon to do a postmortem for the purposes mentioned as number one, but the points two and three will more frequently give us cause for making the postmortem, and I wish especially to call attention to No. 2 in Private Practice, "To gain information that will make the diagnosis of similar cases easier and more certain in the future."

There are many obscure cases that present symptoms that we cannot thoroughly explain, we see nothing to cause death, but in spite of our best efforts the patient gradually declines and dies; or it may be that a person dies suddenly, and the physician is called in afterwards and always expected to give an opinion as to the cause of death.

There is a natural prejudice on the part of every one against having the beloved dead disfigured, or subjected to the surgeon's knife in any way. In deference to this feeling and with profound sympathy for the sorrowing ones, the physician is reluctant to ask for a privilege which would seem to have the cold aspect of scientific investigation, and, yet, I am convinced that the friends, after proper explanation, would in a large number of cases gladly agree to a post mortem. I have been agreeably surprised at the number of cases where this privilege has been accorded to me in private practice. It is seldom the case that an autopsy of this kind can be made as complete as is done in institutional work, and the physician should modify the operation in every particular to meet the demands of the situation and the wishes of the friends. As illustrating a method that may be pursued, I will state briefly the details of a postmortem held in a country home during the past year.

The patient was a man of forty-six years of age, who, about nine months previously, had been operated on by an intelligent surgeon for the removal of a growth on the left arm. Unfortunately a microscopic inspection was not made of this growth, but the gross specimen was pronounced by the surgeon a sarcoma. Without going into the detail of the clinical history, I was called in consultation with a view to operating for a supposed sarcoma under the right arm. This was about six weeks before his death. I found in addition to a very large tumor in the right side, immediately below the axilla, a small, soft growth in front of the sternum; another growth on the left arm, the size of a goose egg; and also a very de-

cided enlargement in the right inguinal region. The urinary examination showed slight albumen and a few tube casts. The heart and circulation presented nothing abnormal. The lungs presented no dullness on percussion, or rales, and there was no cough. There was a slight roughness about the respiratory murmur, but to which, I am frank to confess, I did not attach much importance. Under the circumstances, however, I considered an operation out of the question, and so advised. I also confessed my inability to make a satisfactory diagnosis.

After the patient's death the attending physician, who was a very progressive young man, suggested that we ask the family to allow a postmortem. We went direct to the sorrowing widow. At first she hesitated, but presently agreed, saying that we must not take away any part of him. I told her we would, of course, observe her wishes, but requested that she would modify this condition by allowing us to take a small particle from each organ examined, and we would promise that everything else should be replaced, and the smallest disfigurement possible made. She agreed to it, and she, of course, agreed for the several doctors present to witness the work, and also permitted a number of male friends of the deceased to remain in the room.

I can truly say that I have never had a more interested group to hear me lecture than were those farmers who gathered around the death table on that afternoon. I explained to them candidly the occasion for what we were doing. It was a case that we physicians did not thoroughly understand. We treated symptoms as they arose, and relieved conditions as far as possible, but we were baffled all along the line, and did not even know the nature of our enemy. We had asked, therefore, for the privilege of making this examination in order that we might find out whatever might be relieved by the examination of the internal organs. This could be of no benefit or harm to the dead; it probably would be of no direct benefit to his living family, but for the information of the doctors in what had been to them an interesting as well as obscure case, this postmortem had been requested and granted. It might be of benefit to them in treating similar cases, should they arise in future, and at any rate it would give them a broader knowledge of the changes that may be found in the body and the connection between them and the symptoms as presented during life. I expressed our appreciation of the privilege granted us, and demonstrated, as I proceeded with the work, the various organs, pointing out the deviations from the normal where found.

As already said, the farmers were as interested as the doctors in the examination, and they were especially pleased as I held up the appendix and showed them the little organ that they had already heard so much about as the seat of trouble in appendicitis. As I showed them the lungs, and pointed out numerous small tubercles scattered here and there, they appreciated the significance of the term, "The first stage of pulmonary tuberculosis." When I exposed the tumor in the side, and found an immense mass squeezed between the ribs and protruding beyond, so as to press the lung out of all shape, none of us could doubt the explanation of the pain that this growth had been causing. The large growth in the inguinal region, the enlarged mesenteric glands and the comparatively normal condition of most of the other organs were examined with interest. When the kidneys were taken up, however, they were seen to be swollen and irregular. Several incisions revealed numerous small abscesses, at the sight of which even the laymen present wondered how he could live a day with such organs. Here was sufficient and certain cause of death even though we could have arrested the disease in the lungs and removed all the growths that had at first given so much concern. Every one present seemed to be satisfied with the explanation given for taking a part of the morbid growths and diseased organs for examination under the microscope, and also sections from the organs that did not show disease to the naked eye to ascertain if any changes could be revealed in them by the microscope. I will say briefly that our laboratory examination confirmed the presence of tubercles in the lungs, diffuse inflammation, and tubercular abscesses in the kidneys, and round celled sarcoma in the tumor growths examined.

A similar method of procedure modified to meet different circumstances would be of immense advantage to the practitioner, the public would gradually become accustomed to it, and people must necessarily respect the motives of the physician who approaches the matter in the proper spirit.

Post Operative, Leucorrhoea, and Endometritis, Possible Causes and Treatment.*

By Dr. C. M. Strong, 609 S. Tryon Sreet, Charlotte, N. C.

To any one who has done much surgical work on the reproductive organs of women this subject must appeal. The subsequent history of ovarian, tubal, and even supravaginal hysterectomy almost invariably shows some form of this trouble, and like

*Read before the recent meeting of the N. C. Medical Society at Charlotte, N. C.

Banquo's Ghost will not down.

I for a long time dismissed these cases with some antiseptic wash, and abundant advice and a flattering prognosis, which, alas! did not always materialize. This fact caused me to study these cases more fully, and has brought me to certain conclusions; which are not complete by any means, and I hope by drawing your attention to them that you can enlighten the subject more fully.

1st Conclusion.—We should prepare our patients by telling them that a leucorrhoea will possibly follow an operation.

2nd Conclusion.—In order to cure these cases we must first find the cause. I have not always done this, yet in a few cases I have removed it—and cured them.

I will give you my theories for what they are worth. I have found some of these cases are preventable, some amenable to treatment, and some are not. I also found about the same symptoms present. The symptoms usually come on from 3 months to 1 year after operation, and this symptom is a more or less persistent Leucorrhoea-ichorous, and offensive; this may be accounted for partially only, from the fact that they usually consider themselves cured, and are careless about cleansing themselves. Hence we should always advise douches for sometime after operation.

But in spite of these as I have noted in several cases this objectionable sequalæ has continued. I have noted several causes for this condition, and to better explain them will cite a few representative cases.

Mrs. B , age 22, was operated on 2 years before seeing me again for double ovarian dermoids—good recovery, fine health. Ten months afterward was troubled with profuse leucorrhoea, offensive, ichorous. This continued in spite of frequent saline antiseptic douches. On examination uterus showed atrophy, no tenderness or peri-uterine trouble. Cause, I believe, was a presenile endometeritis, because the uterus did not throw off the detritus at each menstrual epoch, and this retention sets up this endometritis.

This same condition is noted after menopause. Treatment; curettage, and swabbing out with carbolic acid 1 part, iodine 2 parts, and douche of Creolin; 6 months after, no return.

Another case, Mrs. A., age 18, operation 3 years ago; double pus tubes, 3 months after had the same form of leucorrhoea, used same treatment, but only partial relief. Cause in this case, I believe, was due to the fact that the tubes were tied off from the uterus, instead of being totally obliterated. That is by making incision into the cavity of the uterus and taking all the tube out, for I believe in most cases of infection it extends into the body of the uterus and this keeps up the leucorrhoea. This class are preventable, provided we thoroughly curet and disinfect the uterus at time of operation.

Another case, Mrs. A., 42; 18 months ago operation for multiple interstitial fibroids, in which a supra-vaginal hysterectomy and ovariotomy was done; returned 10 months after with a very troublesome, offensive leucorrhoea. It was the peculiar white of egg, viscid, indicative of cervical trouble. Examination showed enlarged cervical glands. Treatment; scarifying and deep burning with Thermo cautery, which, by the way, I have found to be a very effective treatment for cervical catarrh. This was an uncured case of cervical gland infection. This treatment was successful in this case.

Mrs. S., 41; operated upon 12 months ago for multiple interstitial fibroids and ovariotomy; came back in 5 months with same story in her case. The discharge was more serous but was foetid; examination showed large, soft os, glands normal.

Cause.—I remembered having had trouble in tying off the pampiniform plexus leaving a haematoma on left side. I think I tied off the venous system most too well, in this case produced a chronic stasis and leucorrhoea. Treatment in this case has been disappointing.

Final Conclusion.

1st. I don't think we pay enough attention to post operative symptoms.

2nd. We should warn them of their possibility.

3rd. We can prevent some of them.

4th. We can cure some of them.

5th. We can help some of them.

6th. The text books are silent about them.

7th. There are enough good operators present here today to offer some other explanation, and help us to make our patients stay cured, or possibly I am the only one who has these unpleasant sequalæ.

National Recognition of the Medical Profession.*

By Oliver Hicks, M. D., Caroleen, N. C.

The success that has attended the efforts of the medical fraternity in the way of scientific research, hygiene and sanitation, during the last few decades, gives assurance of the good we could accomplish if we had the authority and the facilities to prosecute the work as it should be done. Past records show that we are worthy of confidence;—of all the scoundrels that have been given pub-

*Read before the North Carolina Medical Society at Charlotte.

licity, especially those of recent years, no organization of physicians, and no individual physicians, holding positions of trust or honor have been guilty of crime, nor has there been cause given for the Muck rake to plunge its ravenous fangs into our ranks.

In order to be understood fully it is necessary to refer to a few of the evils that fasten disease upon man—often for life.

Damaging errors and violations of the laws of health begin in the puerperal chamber, when the tender, helpless, innocent takes his earliest breath, and injuries are inflicted that extend through infancy, childhood, and to maturity, when partly by chance and in part by inherent vigor, he breaks loose from the inherited errors, mysticisms and superstitions of his attendants, that have haunted his infancy and childhood.

It would seem an easy task to teach intelligent women that healthy infants at birth are not "perishing to death" or freezing, and that their little stomach will not receive and retain a pint of catnip tea, or a wad of fat bacon without serious consequences—the one to do what nature failed in, as they suppose, and the other to cut the phlegm from its throat.

After repeated efforts I have not succeeded in convincing one individual that God had provided in the maternal bosom the nourishment needed, and that the rattle in the throat is caused not by phlegm, but by a very necessary mucous which he will swallow when given the breast. Many cases of gastro-intestinal, hepatic, renal and other affections of long duration have their origin in the errors of feeding and clothing the infant. It is worse than useless to tell mothers and attendants that infants and children generate more animal heat in proportion to weight than older persons. Its "freezing" seems to be a term enthroned about the little victim. Authority alone can penetrate this cordon of errors.

To explain to parents the importance of masticating the food, especially in childhood and youth, is almost invariably disregarded, and in many instances ridiculed. If they were made to know of the suffering, and damage to health and the constitution that result from bolting the food they would gladly listen to the teaching.

From infancy and childhood we enter the period of adolescence—the most momentous in life, full of conditions and events that may be developed into good or evil, according to the influence brought to bear during that epoch. When girls and boys approach puberty they should be instructed by parents who have been taught by the family physician in regard to the great changes that are approaching. This information should be imparted with the utmost care, delicacy and tact. They should be given rules of conduct as to dress, diet and exercise. Instead they are left either in utter ignorance, or to the care of the ignorant, superstitious and vicious, who are ever ready and anxious to impart their dangerous knowledge and advice. Vast numbers of our youth, especially girls, are ruined for life mentally and physically at this period, and thousands, after years of suffering, go prematurely to the grave.

None but physicians of long and varied clinical experience can form an adequate idea of the awful ravages that the venereal diseases are causing. The statistics are appalling, and as no effort has been made by legislative enactment to stay its blighting breath, it continues to spread its poluting, death dealing virus. Scientific methods and treatment will have succeeded in eradicating the disease when, supplemented by legal authority, and the means and facilities for enforcing obedience to instructions, these two, alike insidious, alike potent for evil, and a reproach which the most debased wish to conceal. Their management is often entrusted to ignorant, superstitious quacks, whose false representations and promises cheat the victim of his best chance for cure, and when at last he applies to a physician, the frightful results of mal-practice are added to the disease. Only organized effort, supported by legal authority, can deal successfully with such an appalling scourge.

That the United States mails and the public press are made the means of disseminating disease is a sad comment upon the wisdom of our national officials; nevertheless, it is true. Patent medicines and advertised cures are responsible for a large proportion of the chronic diseases among us, apart from the disease they cause—they are both insidious, and apparently fascinating swindles, backed as they are by unlimited capital, with nothing to restrain them, their power for evil is enormous.

If our officials were informed in regard to the numberless errors that exist, even with better informed classes, relative to the prevention and cure of disease, sick-room usages, etc., they would confer upon the medical profession the authority and the means to deal with them, to drive from our shores all contagious and infectious diseases, and put a stop to poisoning our people through the mails and public press.

There is but one way to attain that end, and that is to establish at Washington a Department of Public Health, with an accomplished physician as Secretary, and a corps of educated physicians to be used at his discretion, to the most remote townships.

Turn over to him the medical departments of the army and navy, and with their knowledge and assistance he will be in a position to attack successfully the gigantic evils that are hastening our march towards race suicide.

When it is recalled that many of our great discoveries, and much research have been made in the face of strong opposition, and that all we know of comparative anatomy and physiology has been gained behind barred doors, the wonder is that we have accomplished anything.

Now is the time to institute measures for the establishment of this very necessary and important department of the national government, while we have a President who possesses the wisdom, the judgment and courage to aid us.

Why Doctors Disbelieve in Patent Medicines.

Remarks of Dr. J. Howell Way, of Waynesville, N. C., before the House Committee at the hearings of the Bill of Congressman Webb to provide for the publication of the composition on the label of so-called "patent" medicines. February 15, 1906, at Washington, D. C.

I have been much interested in the earnest efforts in behalf of the masses of the country in attempting to secure the enactment of such legislation as will insure to the people a knowledge of the composition of the various medical compounds offered for sale everywhere throughout the country and without any restrictions whatever.

In America, where the proprietary medicine interests have become so all-powerful, it is sad to see how far we are behind some of the enlightened European States.

From a personal view-point I always, gentlemen, feel a certain delicacy in expressing an opinion in public about this matter of secret medicines, or "patent medicines," as they are commonly termed. There is, as you well know, a prevalent impression that "doctors are jealous of patent medicines and the wonderful cures they make." Now, I need not say to gentlemen of your intelligence that is a wholly unjustifiable assumption and does the members of my profession the grossest injustice. All observant men recognize that unless he is a success, the great majority of the men who study medicine quit the practice after a few years and embark in other avenues of life work. If he is a successful man as a physician, he gets busy, grows to love his work, and becomes in many senses the real true friend of the people—all the people, too, not the people of certain classes, but of all the people.

He learns the people, he attains a practical knowledge of what is helpful and really useful to the people—a degree of this particular kind of knowledge which is probably not equaled by any other individual of the community.

I do not misrepresent matters when I say to you that the rank and file of the members of the medical profession look with horror upon the continued open sale to the people, without any restrictions whatever, of all sorts and kinds of poisons and habit-engendering preparations.

Certainly, after twenty years' experience as a physician, I am free to say to you that the harm done the people by the free use of alcoholic liquors themselves (and we all admit their indiscriminate use has been hurtful to our people) has in all probability not equaled the hurtful influences wrought by the unrestricted sale of poisonous medicines without a knowledge on the part of our people of the dangers to which they were subjecting themselves or their children in such use. Daily do we see instances of several drug habits fastened upon men and women and children who fall into the snare of using some secret remedy which was labeled in such a way as to not only exclude any information as to what it really contained, but, worse, deliberately making a misleading statement to the effect that it was "absolutely free from all danger," etc., and other alluring words.

I believe it is high time to call a halt and to, in common justice to humanity, at least throw as much restraint around the medicines openly sold to any and all men, women and children, as are thrown around the sale of bran for our milk cows or fertilizer for our fields. You know each bag of bran in North Carolina has a tag showing its constituents; each sack of fertilizer has a label showing its chemical formula. Certain narcotic drugs can only be sold on physicians' prescriptions, and then by legally registered druggists—both the doctor who prescribes and the pharmacist who fills shall each have given the State ample evidence of possessing a minimum degree of knowledge relative to the character of the body the medicine is to go into, the proper dose, correct method of preparing, etc. And yet, while this is true, you know it to be a fact that any ignorant man who knows only sufficient chemistry to mix whitewash for a negro shanty or mud to chink the cracks of a log cabin can, if he so elects, legally buy, mix, designate their use for certain diseased states of the human body, and sell all deadly poisons without hindrance in the United States. Is this wise? Is it right?

Is not a continuance of such conditions fraught with danger to our people? In this day when the strong arm of Government is raised to "protect" all classes of business, when the laws of the land insist that the

weakest shall have the chance of surviving and trying his hand with the world, when the strong are held back from encroaching on the prerogatives of the weaker, I submit is it not high time the veil should be lifted from the "patent medicine" trust and its iniquities laid bare?

I hardly need to say that I doubt if any layman of real intelligence believes now-a-days any of the stuff he reads about the "wonderful discovery by the Indians," etc., or similar claims heralded by these fakirs as being aught save simply "business methods" or "chaff for the gullible." There are no secrets in legitimate medicine as known and practiced by the greatest physicians of the earth.

The great surgeons, specialists, and physicians of the earth in every land and civilized clime do their work in the open glare, so far as a knowledge of their methods, medicines, and surgical procedures is concerned. To all other physicians their work is an open sesame, and every doctor who cares to know how a certain great man treats such a disease can find out by the asking. It matters little where the physician lives or what his method or language, his precise methods in every detail are given gladly. His drugs, his system, his combinations used, and the dosage—in fact, every detail is known among all other physicians desiring to know the same. Such has always been one of the most cherished traditions of our profession and our art; and this sentiment has ever received the respect and honorable adherence of all respecting medical men.

Our American people are the most practical people the world has seen. Why should they continue to be victimized by the "patent-medicine trust?" I wish you success in your most worthy efforts to rid the Union of this useless combine. Pass such enactments as will plainly place upon the label of each package the exact amount of the constituent ingredients, then the meritorious preparations of simple, useful remedies used for minor domestic ailments may still be compounded, bought, and sold without restraint, and only those possessed of pernicious effects will have occasion to feel they have been hurt by such legislation.

Compulsory Notification in Tuberculosis.

Roberston, (The Edinburgh Medical Journal,) mentions the following reasons for the compulsory notification of cases of pulmonary tuberculosis:

1 The private medical attendant in nine cases out of ten has to concern himself with the medical treatment of the case, as distinguished from the prevention of spread of the disease; and at the present time, where there is no notification, there is, one finds, in practice very little attention paid to the steps which should be taken in preventing the patient from spreading the disease to others. Where notification is generally adopted, it will be possible to get in the larger districts skilled persons to devote their time to ensuring, within reasonable limits, that the infectious person carries out the very simple precautions that are known to be necessary to prevent the disease spreading.

2. By getting to know in a systematic manner all cases of tuberculosis of the lung, statistics will in time accumulate on the important points in the etiology of the disease, At the present time, for instance, our figures, based on inquiries made after death, are of little value in demonstrating the conditions which obtained at an early stage of the disease.

3. Such notification will enable disinfection and cleaning to be looked after in a systematic and regular fashion.

4. It will draw particular attention to the fact that the disease may be spread if the sufferer is not careful.

The Diagnosis of Pernicious Anemia.

Emery (The London Practitioner.) mentions the diagnosis of pernicious anemia and considers the signs individually and in detail as follows: (a) High color index, (b) the presence of megaloblasts, (c) the presence of megalocytes, (d) leucopenia, (e) relative lymphocytosis, (f) polychromatophile, and other forms of degeneration of the red blood corpuscles. The author says that the diagnosis is best conducted on the following lines: Determine the color index and while counting the red blood corpuscles, notice incidentally whether any appear abnormally larger than one-third of the diameter of the half-square on the counting machine. If the index is so high as to arouse suspicion of the disease, proceed to make a leucocyte count. If this is low, make a differential count on a stained film, keeping a sharp lookout for neucleated polychromatophile or punctate form. If there is a relative lymphocytosis the diagnosis is very probable and the film should be examined for megalocytes. The next process consists in a further search for nucleated red blood corpuscles whether megaloblasts or not. If all the previous signs are positive, however, the author believes that the diagnosis may be made without their discovery.

The Pathology of Renal Dropsy.

Bainbridge (The London Practitioner,) says that the causation of renal dropsy, though still very obscure, presents certain factors which stand out prominently in its production. A scanty output of urine as indicated by the observations of Dickenson, and by the fact that in chronic nephritis the onset of cardic hypertrophy and increased urinary flow are often accomplished by diminution of the dropsy, the retention in the body of sodium chloride and possibly other salts, owing to the deficient excretory power on the part of the kidneys; as a result of osmotic changes the retention of salts necessitates the retention of water as well, increased metabolism in the muscles in consequence of a partial or complete loss of control over the muscular metabolism by the kidneys, brings about the accumulation in the muscles and tissue spaces of waste products. These by a process of osmosis attract water from the blood into the tissue spaces, which cannot be carried off by the lymph channels, thus edema makes its appearance.

Immunization Through Milk.

Salge (Jahrbuch fur Kinderheilkunde) describes the continuation of his work on the subject of the passage of antitoxin through the intestinal walls of infants.

In the former work he showed that antitoxin when fed to infants in the form of heterologous serums did not pass from the intestinal canal into the circulation, while antitoxin present in mother's milk as a result of either active or passive immunization would penetrate the intestinal walls and be found in the circulating blood of the sucking child.

The first portion of the present paper is occupied by replies to certain criticisms of his former paper. Replying to Seigert's criticism that his method of testing the antitoxic power of bloods might be at fault or questionable, he again gives some of the details of the method and points out the features of it which demonstrate its delicacy. As the method was devised by Marx, and is approved by Ehrlich who originated the now thoroughly well recognized and accepted system of antitoxin testing, it is most unlikely that the method used was at fault.

He also replies to the statements of Ganghofner and Lange that the stomach of a child of five days old can completely digest the small amounts of albumins such as Salge fed in the form of serum, and thus destroy the antitoxin, but that when larger amounts are given, antitoxin is absorbed because of an insufficient digestive power, that he also considers this as possible, but that such a procedure of over-loading the digestive powers could have no solid basis as a useful therapeutic measure.

He seeds to learn whether the antibodies present in the milk of actively immunized animals will be absorbed by the infants fed upon such milk.

The writer's first experiments were made with the milk of a goat immunized to diphtheria. This milk, containing one-twentieth of an antitoxic unit per cubic centimetre, was fed in its raw state to three infants.

The amount of antitoxin present in the infants' blood was determined in each case before the milk-feedings were inaugurated.

The first child when four days old began to receive the goat's milk, and during the following three weeks took two litres. At the beginning of the experiment the child's serum contained a total of five antitoxic units, and the dose of milk per day also contained five units, and yet at the end of the three weeks' treatment the test of the child's serum showed no gain in antitoxic strength.

The results were practically the same with the other two children fed with the goat's milk, although their ages were nine and thirty-four days respectively.

In neither of these children did the tests of the antitoxic strength of their serums show any increase after the milk-feedings.

Salge then tried the effect of feeding the milk of a goat immunized by the subcutaneous injection of typhoid bacilli. The milk of the goat contained sufficient typhoid protective bodies so that 0.04 of a cubic centimetre of it would protect a guinea pig from the injection of ten fatal doses of typhoid bacilli.

Child number three of the diphtheria series, when nine weeks old, began to be fed two hundred and twenty cubic centimetres of this milk a day, but after three weeks of such feeding no typhoid immune bodies were present in its blood serum.

Similar results were obtained in a second child in which the feedings began at the twelfth week.

He says that the feeding of infants with animals' milk containing antitoxic and immune bodies does not bring about the transference of those bodies into the circulating blood of those infants.

His experiments as a whole show that the specific properties of mother's milk are available for the infant, and those of cow's milk for the calf, but there is nothing gained by the feeding of the cow's milk to the infant.

Charlotte Medical Journal

EDWARD C. REGISTER, M. D., Editor.

No. 36 South Tryon Street, - - - -

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THE NORTH CAROLINA MEDICAL SOCIETY MEETING.

The fifty-third annual session of the North Carolina Medical Society, held in the city of Charlotte, May 29-31, was the largest and most enthusiastic meeting in the history of the Society, there being about 402 members registered in attendance, which is forty-two in excess of the number registered present at the last meeting, held at Greensboro—up to that time the most largely attended session of the Society ever held.

The program consisted of one hundred and fifty three papers, all but three having been prepared by members of the Society. This illustrates the very great interest the medical profession is now taking in the Society; those who have taken an active part in developing this interest among the members deserve the approval and thanks of the loyal members of the Society. A meeting like we had in Charlotte will tend to build up the profession in the State more than any previous meeting; the specialist, the general practitioner, the village and the country physician were all alike interested. We have always wanted to see on our programs, a larger number of papers written by physicians in the country—the men who do the laborious work in the rural districts, and who, out of a ripe experience, can make many wise and helpful suggestions. To persuade as many physicians as possible to prepare and read papers before the annual meetings is the best way to develop all the members of the Society, and any policy that discourages the efforts of the general practitioner or the country doctor, is detrimental to the best interests of the profession. If it is the policy of any man in the State to want to eliminate from our annual programs, the doctor from the country, we would like for him to let it be known; judging from a few little murmurs heard at this meeting we believe that we have a few such men in this State.

Every physician in Charlotte, as well as every citizen who was called on to assist, deserves the heartiest praise for the success of the meeting. Dr. R. L. Gibbon, chairman, and Mr. R. H. Jordan, a member of the local committee, earned especial thanks for their efforts; it is largely due to their untiring and efficient services that the reception at the Colonial Club, on Tuesday night, and the banquet, at O'Donoghue Hall, on Wednesday night, were such pleasing functions. Every member of the Committee of Arrangements, however, did his full duty, contributing liberally of time and money, and those who were most concerned for the success of the meeting feel grateful for their valued help.

The Society was called to order Tuesday morning, at 10 o'clock, by Dr. R. L. Gibbon, in well chosen and appropriate words of greeting.

Hon. T. C. Guthrie, of the local bar, delivered the address of welcome; he spoke of the rapid progress the profession is making, of the prominent position it has assumed in relation to other scientific bodies and predicted (in speaking of our local medical colleges), that it will not be long before we may hear expert medical witnesses say, with pride, that they are graduates of some North Carolina Medical College. He spoke warmly of what physicians are doing for our State, and the beautiful address was worthy of the applause which it received.

Dr. W. A. Graham of Durham was to have responded to the address of welcome, but being detained by illness in his family, Dr. B. K. Hays, of Oxford, took his place and made a delightful response.

The address of the president appears in full in this issue of the Journal.

Dr. S. D. Booth, of Oxford, the newly elected president, is one of the oldest and most distinguished members of the Society; he studied at the Medical College of Virginia in 1867, was licensed in 1885 and joined the Society the same year. The writer does not recall a meeting when Dr. Booth was not present, and he always participates freely in the discussion of papers read before the Society.

The new secretary, Dr. D. A. Stanton, of High Point, is well and favorably known. He has been councilor for the 8th district for two years, and has discharged his duties in this office most acceptably. Dr. Stanton is a successful practitioner, and a good business man; we have every reason to believe that he will take interest in the affairs of the Society. It is a great sacrifice for a man like Dr. Stanton to accept the position as secretary for the State Medical Society; it means an immense amount of work and requires pains-taking and intelligent oversight in countless details.

The next annual meeting will be held at Morehead City.

THE ETIOLOGY OF PARESIS.

General paralysis of the insane, dementia paralytica, paresis or progressive paralysis is one of the most terrible maladies that can afflict mankind, it is almost invariably fatal within a few years and is apparently on the increase, probably ten to twenty per cent.

of all cases in the chronic wards of the state institutions in Great Britain are diagnosed as general paralysis.

Paresis can be defined as an organic disease of the cerebral cortex characterized by progression, by the combined presence of mental and motor symptoms, the former always including mental enfeeblement and facility, often combined with delusions of grandeur and morbid ideas of expansion and self satisfaction, motor deficiencies, always including a defective articulation, fibrillar tremors, incoordination and paralysis spreading to the whole of the nerve tissues in the body. Tabes dorsalis and general paralysis are closely allied if not the same disease, in the former the spinal column being the part affected.

The etiology of general paralysis has, like all nervous diseases, been assigned to syphilis, alcoholism, heredity and sexual excesses. At first it was maintained that it was simply a manifestation of syphilis, but as antisyphilitic treatment proved to be useless it was decided that it was a secondary autointoxication, this was the parasyphilitic period, a product of premature induction, harmonizing with no proven or demonstrable fact. The theories of the pathologic process were also at variance, some maintaining that there is a premature involution of the cortical neurons and that the other changes are secondary, others maintain that the cerebral vascular lesions are the first to occur and that the nervous conditions follow. Bruce and MacPherson in 1901 pointed out that there is a recurrent febrile attack every one or two weeks accompanied by leucocytosis and hyperleucocytosis which occurs in the third stage of the disease without the elevation of the temperature, and from their observations concluded that general paralysis was a disease due to poisoning by the toxins of bacteria whose point of attack is through the gastric and intestinal tract and that B coli was one of the factors in the disease, atrophic catarrh of the stomach and small intestine being invariably present. Chronic endarteritis in the extra central vessels is also constantly present both in general paralysis and in tabes. In 1902 McRae, Jeffrey and Ford Robertson commenced a systematic bacteriological investigation of the gastro intestinal tract, the bronchi, lungs, brain, etc., and found an organism resembling the Klebs Loffer bacillus in twenty cases, obtaining cultures from the brain in four cases.

A series of experiments were made to see if these diptheroid bacilli would produce changes resembling those of general paralysis in the lower animals. The guinea pig proved to be immune, but white rats died both after hyperdermic injection of the cultures and after administration in the food in about two months. The bacillus was recovered in the catarrhal exudations in the alimentary tract and bronchi.

A large proportion of the nerve cells of the cortex and cord were found to be degenerated. Dr. Bruce also injected a goat with cultures at intervals; at the end of six months the animal had a seizure resembling the congestive attacks of general paralysis. The brain showed proliferation changes in the nerve cells and vessel walls, several distinct plasma cells were detected which have been held to be diagnostic of general paralysis. The diptheroid bacillus has been found in the discharge of chronic leucorrhoea from which female paretics invariably suffer, also in the male urethra and in the urine of a case of paresis combined with tabes. In the spinal fluid and also in the blood Dr. Robertson has also been able to demonstrate the bacilli.

Should the work of Robertson and his colleagues be confirmed, a great step will have been made in our knowledge of nervous diseases and even if an antitoxin be not found it will stimulate to treatment on rational lines. It is probable that other nervous and mental diseases are of bacterial origin, noteably epilepsy, which is almost certainly of toxic origin, it being difficult to conceive of an intermittent toxaemia due to any other cause, Dr. Hares' recent hypothesis that migraine, epilepsy and asthma are due to accumulation of the intermediatory products of carbohydrate metabolism in the system may be true of gout but does not seem to be tenable in epilepsy. We have maintained for some years that epilepsy had its origin in the digestive tract; there may be several forms of endogenous toxins capable of producing convulsive seizures, either of bacterial or metabolic origin and the work of Selmi and of other Italian workers goes to prove that in some cases partial immunity from convulsions can be obtained by injections of the serum of an epileptic, obtained during the attack, in the intermediate spasm-free periods.

A CYTOLYTIC SERUM FOR THE TREATMENT OF EXOPHTHALMIC GOITRE.

The treatment of exophthalmic goitre is a question of relieving troublesome symptoms. No treatment so far employed is capable of curing the disease. Since the introduction of organic extracts into therapeutics, attempts have been made to find an organic substance which would stop its progress. It was soon found that thyroid extract aggravated the symptoms instead of relieving them. Later, the serum of thyroidectomized dogs and thyroidectomized sheep was used, both by mouth and hypo-

dermically. The results of the use of such a serum have not been uniform. The production of a serum having a cytolytic action for the thyroid gland has not, so far, been successful. Beebe (*Journal of the American Medical Association*, February 17, 1906) has recently produced a cytolytic serum by injecting the nucleoproteids obtained from the thyroid glands of two fatal cases of exophthalmic goitre, into rabbits by the intraperitoneal route, at five day intervals. The animals were bled on the eighth day after the last injection and the serum thus obtained was used in the treatment of ten cases of exopthalmic goitre by Rogers.

The ideal result to be obtained from such a serum is an inhibition of glandular activity which will be sufficient to restore a normal or nearly normal function to the hypertrophied thyroid of exophthalmic goitre. But, on account of the fact that the thyroid secretion probably has a toxic action, it will be well to endeavor to neutralize the toxin as well as to inhibit the glandular activity. Beebe's former work on the production of antisera by the injection of the nucleoproteids of liver and kidney showed that such sera have a weak hæmolytic and hæmagglutinative action; but in the dilutions used in the animal body neither of these actions is manifest. Beebe and Rogers conclude that by the method described it is possible to develop a serum of a high degree of specificity. Of the ten patients who were treated with the serum under discussion, three were apparently perfectly cured, three were rescued from a critical condition and were approaching cure at the time the report was made to the New York Academy of Medicine and the other four were more or less improved. Beebe reminds those who attempt to use this method of treatment that an active antiserum made from human tissues is capable of doing a great deal of harm and that the therapeutic dose is a very small one. Alarming reactions have followed the injection of one cubic centimetre. Rogers adds the warning that the least error or variation in the complex mechanical or chemical methods employed by Dr. Beebe may spoil the finished serum or make it extremely dangerous. And, he also adds, a very skillful chemist, experienced in biological work, is a necessity.

THE INFECTIOUSNESS OF CEREBRO-SPINAL MENINGITIS.

The epoch-making work of Weichselbaum in 1887, when he found the micro-organismal cause of spotted fever, supplied a basis upon which to work out the complete etiology and transmission of the disease. Since this author's publication many others have corroborated his findings but no one has added the link of the transmission to the chain of the etiology.

The disease must of needs be infectious, belonging to that division of infectious diseases which we call "contagious" because we are ignorant of their mode of communication.

Recent investigations have proven that the diplococcus intracellularis meningitidis may be found in the nasal and pharyngeal cavities of a very large percentage (50) of patients suffering with this disease, during the first two weeks, in 10% of those attendant upon such cases, and in a few healthy persons who have not been in contact in any way with patients suffering from cerebro-spinal meningitis.

These facts show conclusively that the bacteria are present in the air, but they do not show how they may gain entrance to the body in some instances and affect the meninges. Whether the organisms penetrate to the meninges directly through the cribriform plate of the ethmoid bone or by a lymphogenous or hematogenous route has not yet been proven. The blood is known to contain them in the early stage of the disease.

In considering the nose and throat contagion of this disease, a comparison with epidemics of streptococcal sore throat might be permitted, in which the infection has been observed to begin mildly, progress to a maximum severity and then decline in virulence. This may depend upon the fact that the microorganism becomes more and more virulent as it passes from throat to throat, finding such a medium favorable to its growth, until it meets a mucous membrane which is resistant, thereby hindering its development, so that when it arrives on another throat it is unable to excite as great a reaction, which inability becomes greater on its next passage. Indeed such a curve of activity and virulence has been observed. It is much easier to trace this curve with an organism like the streptococcus which is cultured with more ease than the meningococcus, the latter requiring experience and great care in the technique. Indeed, the pathogenicity of the diplococcus intracellularis in laboratory animals is so variable and uncertain that it is of no value in this respect. But everyone knows how an epidemic progresses gradually to its height, remains there for a time and then recedes. Is it not possible that the direct transmission of bacteria through the air may give it opportunity to enhance its virulence by frequent transplantation on favorable soil until it meets an unfavorable or inimical medium, perhaps a few consecutive times, by which its infectiousness is much decreased?

Whatever the method of transmission or

infection, the presence of this coccus, now conceded to be the microorganismal cause of the disease, in the nares and throats of the sick and the well, indicates most strongly that a strict antiseptic treatment of these cavities should be maintained, at least during the attack, both of the patient and of those coming in contact with him in any way.

THE DIAGNOSIS OF SPLENIC ANEMIA.

That form of idiopathic anemia with splenic enlargement, which is frequently followed by an increase in the size of the liver (then called Banti's disease), has been much confused with other conditions whose clinical course is similar, notably primary cirrhosis of the liver, primary splenomegaly, malaria, injury to the spleen and the like. The symptom-complex known as splenic anemia is as yet little understood from a pathological standpoint, but we may say with certainty that such an idiopathic symptom-complex does exist; whether or not it belongs to any other process remains for the future to show.

The description of the first stage of Banti's disease as presented by this observer himself coincides exactly with splenic anemia as described by others. But this does not mean, according to Senator, that splenic anemia is always a precursor of Banti's disease, nor that this latter must always follow the former.

The idiopathic cases, or those of true splenic anemia, present no especially characteristic pathological changes, the principal ones being a cirrhotic atrophy of the spleen with enlargement of the organ, and a proliferation of the endothelial lining of the blood spaces of the pulp, the lymph spaces and the splenic vessels.

With reference to primary splenomegaly, or that enlargement of the organ due to accumulations of endothelial cells having somewhat the appearance of endothelioma (and sometimes so called), the diagnosis is practically impossible. These proliferated endothelial cells have been found in other organs, especially the liver. The liver in these cases is quite apt to increase in size at an early period and attain considerable size; this seems to be the only distinguishing feature clinically.

Caution should be used in making a diagnosis of splenic anemia when there is a history of injury to the splenic region, since enlargement of the viscus may arise from trauma alone or trauma associated with twisting of the splenic stalk.

Malaria is quite difficult to differentiate, but help may be expected from the history, and examination of the blood for the malarial parasites; in this infection a hemorrhagic tendency is absent. Reporters of true splenic anemia have declared the impossibility of a previous malaria. The diagnosis is, however, easier on paper than at the bedside.

This disease has probably no relation to Hodgkin's disease, because of the absence of glandular swelling, the leucopenia. the pigmentation of the skin and the tendency to hemorrhage from the nose, gums and stomach.

Cirrhosis of the liver is not easy to exclude; probably such a diagnosis will not be made when the first symptoms are referable to the anemia and the splenic tumor. In cirrhosis the anemia appears later in the course and is more of the chlorotic type. Leucopenia is the rule in splenic anemia which is by no means frequent in cases of cirrhosis.

Concerning the blood picture of splenic anemia all that can be said is that it shows a progressive secondary anemia with leucopenia and sometimes a few nucleated red corpuscles of no characteristic variety. The examination of the blood of the conditions likely to be confused with this disease will not show sufficient differences to allow us to ascribe any diagnostic importance to it.

A RHEUMATOID CONDITION EXISTING IN IN NERVOUS DISEASES.

In dispensary practice one of the most common complaints of patients is pain along the course of some nerve or nerves usually remittant and intermittent being increased by certain movements, often changing from one limb or group of muscles to another, worse in the morning and after resting for any length of time. As most of dispensary patients belong to the working classes it is very easy to elicit from them a history of some blow or injury over the spinal cord or about the head and as the pain is very often in the lumbar region the patients ascribe it to their kidneys. It is of course advisable to take into consideration the history of injury, especially if there should be absence of reflexes, but by far the largest number of cases are due to a condition of toxaemia in with the same pathologic chemic conditions of the secretions and the excretions as are found in acute rheumatism exist in a mitigated form. Rheumatism is of parasitic origin which in its acute form is characterized by pain, swelling of the joints and of the muscles, usually accompanied by pericardites and endocarditis, leaving permanent cardiac insufficiency in about 50% of all cases. If a history of a previous attack of acute rheumatism can be obtained or if a cardiac lesion can be found it is probable that the patient is suffering from an attenuated rheumatic infection which can usually be diagnosed by the urine which will be decreased in quantity, of a high sp. gr., dark

red in color, owing to the presence of uroerythrin which may be evident in the sediment as a pink precipitate mixed with dark colored crystals of uric acid; an excess of lactic acid may also be present as well as of uric acid, while the total acidity of the urine is high, the ammonia nitrogen is increased in proportion to the urea N, traces of albumin will occur in the majority of cases and at the same time the P O may be as low as 1.0 grmms in the 24 hours. The patient may not be able to give a history with any evidence of acute rheumatism, but urinary analysis will reveal the same conditions as above indicating an acidaemia of the blood and tissues with probably some infections. Other symptoms of the conditions are cutaneous complications, miliaria alba and rubra, roseola, urticaria, herpes, erythema multiform, and rheumatica purpura; any of these eruptions are evidence of acidaemia. A further symptom frequently complained of is formication or a prickling sensation most often in the scalp but occurring in all parts of the body.

In nervous clinics the most common disease is the one most frequently met with, but unfortunately for the patient it is the fashion today to look earnestly for some rare and complicated and to ignore the more common ailments. In medicine the text "Seek and ye will find" is very applicable, because of the variety of the symptoms which every ailment may produce and the ease with which non-existent symptoms can be obtained from patients; by asking leading questions a physician is able to distort a symptom complex into any disease in which he may be specially interested. Patients suffering from the condition usually have no particular digestive symptoms though in an analysis of stomach contents hyperchlorhydria is usually present, constipation the usual accompaniment of excessive hydrochloric acid secretion is also present. There is also usually a high mean blood pressure.

The treatment of this condition is by no means as easy as it would first appear. Every effort should be made to reduce the acidity or rather to increase the alkalinity of the blood and at the same time to reduce the mean blood pressure to normal or below, if possible, for a time. The diet should consist principally of carbohydrates and fats, the proteins being gradually reduced; if meat be suddenly withdrawn digestive disturbances occur owing to the secretions having adapted themselves to a high nitrogen diet, beer and malt liquors should be forbidden but a little whiskey may be substituted if the patient has been in the habit of taking alcohol and feels the need of the stimulation, in fact the physiologic action of alcohol in the form of spirits is beneficial in these cases. Alkalies should be given in full doses with a little magnesia oxide, Salol is to be preferred to sodium salicylate as it has little or no effect upon the stomach and if sufficient sodium chloride and sulphate be taken with the food the salicylic and carbolic acid will not affect the kidneys. A prepared drinking water should be used, the patient taking about 2000 c.c. per diem, a good formula is Sod. chloride 5.0, Sodium sulphate 1.0, Sodium ortho phosphate 0.2, Sodium carbonate 5.0 to the 1000 c.c., or ten antisclerosis tablets to the litre. Electricity applied over the painful areas seems to have a good effect, probably by increasing the metabolic activity. The writer has seen many cases that have been diagnosed as complicated degenerative diseases of the spinal cord which have been cured by the above treatment and were evidently the result of acidemia. That these pains are liable to return after a longer or shorter period is a constant experience; a permanent cure can, however, be usually affected by keeping the patient on the treatment for say six or twelve months, but few patients will continue the treatment after the disappearance of the pains and, in any case, the return to the old dietetic conditions and environment may bring on a fresh attack.

ASTHMA.

Any disease or group of symptoms upon which there is much diversity of opinion as to the etiology, pathology and treatment is generally one in which different conditions produce the same symptoms. Asthma describes a group of symptoms resulting from a variety of causes explained by the most diverse and curious theories by different observers: contraction of the bronchial tubes as nature's effort to expel an irritating humor, as the result of cardiac disease, emphysema, bronchitis, spasm of the respiratory muscles, disorders or immervation of the larynx or bronchial tubes, the result of venous blood in the medulla, uric acid, etc. Presumably there is a focus which is susceptible to irritation from some cause which is remittent in its action, and further the nerves of the susceptible focus are abnormally sensitive. Under such conditions any irritation to the abnormally sensitive nerves of the susceptible area will produce a paroxysm. The susceptible area may be in the nose, pharynx or nasopharynx, due to polypus, hypertrophic catarrh, rhinitis, deviation of the septum, nasal spurs, tumors, adenoids or any condition of the upper respiratory tract causing obstruction to the nasal respiration, excitation of the superior laryngeal or of the first or second branches of the trigeminus increases the blood pressure and produces dyspnoea. Bronchitis

may be a cause or at least may coexist with asthma; cardiac and peptic asthma are also clinical subdivisions, presuming that the focus of irritation is in the stomach or heart, the irritation, when applied to these organs, travels up the pneumogastric nerve causing a paroxysm. Tumefaction of the mucous membrane from capillary vasomotor disturbance may also be a cause of dyspnœa. The exciting irritant has as yet been isolated, but, as in many cases of asthma the elimination of uric acid is much increased, it seems probable that there is a condition of metabolic perversion, producing a toxin, which acts as an irritant to the nervous system, attacking those centres which are the most sensitive. Uric acid and oxalic acid are claimed by many observers to be the irritants which produce the symptoms, but it is improbable that they themselves are the factors, injection of uric acid into the blood stream of a patient will not produce a paroxysm. The nature of successful treatment is always a guide to the pathologic condition. In asthma the blood pressure reducing drugs of great value are amyl nitrate, nitroglycerine, sodium nitrate, erythol tetranitrate, proving that arferiolar contraction is a factor in the attack. Morphin, heroin and apomorphin, the latter probably acting by reducing the blood pressure, are also of value. Cocaine, suprarenalin, chloretone applied to the nasal mucous membrane will give relief in proper cases, inhalation of cigarettes of stramonium leaves and of nitrate of potassium are also beneficial. Chloral and bromide are effective. The constitutional treatment consists in attention to the digestive tract and increasing the oxidation processes, alkalies in full doses before meals and nitro-hydrochloric acid after meals. It must also be remembered that reflex irritation may occur from the genito-urinary tract and from rectal and other diseases. Each case has to be studied separately and treated according to other pathologic conditions, no specific treatment existing for any disease whose nomenclature is based only upon one symptom.

ADAPTATION OF SECRETION TO ENVIRONMENT.

There can be no doubt that the various secretions of the organs are capable of adapting themselves within certain limits to their environment, acquired immunity to disease or to toxaemia produced by accustoming the organism to increasing doses to any poison is a well known example, but the fact that the secretions of the digestive tract adapt themselves to the nature of the food taken has not received the attention it deserves, nor is it sufficiently recognized that this adaptation takes time and that any change of diet requires a certain length of time for the secretions to adapt themselves to its physiologic needs; any sudden change of diet or even of mode of cooking will produce digestive disturbances in delicate people, variations, therefore, should be made gradually in order to prevent not only the gastric irritation but to prevent the patient losing faith in the treatment.

In the case of the over-fed patient who has probably led a sedentary life and consumed a large amount of protein, the stomach will have accustomed itself to produce large quantities of HCL, which in its turn has increased the secretion, enterokinase, pancreatic and biliary secretions, the patient may have continued for years to overfeed himself, until cell fatigue or some other condition supervenes and the succus stomachi is no longer formed in sufficient quantity for the digestion of the protein consumed with consequent digestive disturbances. The dietetic treatment in such cases is the gradual reduction of the protein diet so that it is always kept slightly below the quantity of secretion, thus resting the stomach and at the same time reducing the amount of secretion.

These secretions of the digestive glands are capable of qualitative changes as well as quantitative, in adapting themselves to diet. The pancreas, for example, will secrete a lactose after the animal has been fed with a certain amount of lactose for a variable period, failing to secrete it if the lactose diet is suspended. The pancreas of new born animals secretes no lactose, it only making its appearance a few days after birth as a result of the milk diet. The production of lactose is not due to a direct reaction on the pancreas as the subcutaneous or intravenous injection of lactose does not produce lactose in the pancreas or its juice; it is necessary for the lactose to act upon the mucous membrane of the intestine for sometime. If an extract of the intestinal mucous membrane of a milk fed dog be injected into a biscuit fed dog once a day for three days the pancreatic juice of the biscuit fed dog will contain lactose, proving that some substance is formed in the intestinal mucous membrane of a lactose fed animal which is carried by the blood to the pancreas, producing lactase which is eliminated into the intestine with the pancreatic juice. The failure of digestion of certain foods in certain persons may be due to the inability of the organism to produce the particular ferment. Indigestion may be achieved by the administration of the particular food in small quantities for a few days, thus giving the organism time to adapt itself to the new conditions by the formation of the ferment required.

BOARD OF EXAMINERS' MEETING FOR 1906.

The Board of Medical Examiners met in Charlotte on Wednesday, May 23rd, at 3 p. m. One hundred and thirty-one applicants registered, and the first examination on Physiology was put up at 9 a. m. on Thursday by Dr. Laughinghouse, the President of the Board. At 3 p. m. Anatomy was put up by Dr. Parrott, and at 8 p. m. the examination on Chemistry was held by the Secretary.

On Friday morning at 9 o'clock Dr. Fletcher held his examination on Obstetrics, and at 3 p. m. the examination on Practice by Dr. Kent was held.

Saturday at 9 a. m. Dr. Russell examined on Surgery, and at 3 p. m. Dr. Battle closed the examinations with Materia Medica.

On account of the number of late comers another set of questions were put up on Monday, and while this made a good deal of extra work for the Board it was gone through with in a very satisfactory manner. When the papers were gone over it was found that of the 131 applicants 86 had made the necessary grade to pass, and 45 had failed.

The names of the successful applicants are as follows:

Emile B. Quiller, Rocky Mount.
James H. Harper, Snow Hill.
Major I. Fleming, Hamilton.
Wm. T. Carstorphen, Garysburg.
Allen R. Holshouser, Rockwell.
John O. Simmons, Dysortsville.
Wesley M. Stone, Davidson.
Miles B. Abernethy, Charlotte.
Robert H. Lafferty, Davidson.
Daniel S. Currie, Maxton.
Clarence N. Peeler, Casor.
James A. Byers, Greensboro.
Peter W. Burnett, Oak City.
E. A. Taylor, Bovina, Miss.
Ezekiel E. Smith, Jr., Fayetteville.
Hugh B. York, Williamston.
Hodge A. Newell, Mapleville.
Lewis R. Casteel, Culberson.
Francis W. Janney, Baltimore, Md.
Verner Nisbet, Philadelphia, Pa.
Sam H. Ezzell, Van Wych.
David R. Perkins, Marshall.
Rufus H. Moorefield, Vade Mecum.
Henry H. Hodgin, Red Springs.
Wm. N. Manville, Washington, D. C.
Romulus L. Carlton, North Wilkesboro.
John W. Williams, Washington.
James M. Hodges, Banner's Elk.
Forest A. Carpenter, Henrietta.
James A. Dimmette, Wallburg.
Herbert H. Utley, Cardenas.
Wm. Myers Hunter, Charlotte.
Jacob P. Jarboe, Greensboro.
Wm. L. Sheep, Washington, D. C.
John L. Lane, Faison.
Lemuel W. Kornegay, Mt. Olive.
Rufus R. Morrison, Shelby.
Geo. T. Clark, Sandifer.
Lewis W. Elias, Asheville.
Paul H. Ringer, Asheville.
Theodore Y. Hull, Asheville.
Vann McK. Long, Unionville.
Geo. W. Taylor, Laurel Springs.
Harry M. Jones, Franklin.
W. Allan, Lexington, Va.
Charles H. Peete, Warrenton.
John M. Boyce, Whiteville.
Wilmer L. Grantham, McDonald.
Daniel T. Boger, Unionville.
James C. Waddy, Greensboro.
John L. Pritchard, Aulander.
Edwin F. Fenner, Halifax.
Jesse W. Wilcox, Putnam.
Wm. S. Jordan, Raleigh.
Geo. A. McLemore, Parkersburg.
Battle A. Hocutt, Wakefield.
Milton M. Caldwell, Concord.
James K. Hall, Morganton.
Frank E. Perkins, Copenhagen, N. Y.
Donald H. Leeper, Charlotte.
Iva A. Yaw, Sprite.
Lawrence H. Coffey, Coffeys.
Claude O. Abernethy, Chapel Hill.
James S. Rhodes, Williamston.
Albert H. Bowers, Thomasville.
Oscar J. Carpening, Lenoir.
John T. Haggard, Aulander.
Wm. W. Stancell, Margarettsville.
Albert DeK. Parrott, Kinston.
Henry C. Chalmers, Woodsdale.
Chas. B. Wilkerson, Durham.
Logan E. Farthing, Boone.
James B. Ruffin, Powellsville.
Thos. M. McCoy, Huntersville.
Mary L. Martin, Davidson.
Louis G. Beall, Greensboro.
Mary E. Lapham, Highlands.
Reuben A. Lloyd, Williamston.
Lewis M. Gaines, Wake Forest.
Joseph M. Patterson, New Berne.
Abraham H. Rose, Smithfield.
Geo. D. Vick, Selma.
Edward B. Clement, Salisbury.
Joseph P. Speight, Whitakers.
James W. Tankersley, Salisbury.
Greenville R. Berkeley, Atlanta, Ga.
John Robert Carr, Durham.

The three highest marks were:

1st. Lewis M. Gaines, of Wake Forest, 94 2-7.

2nd. James M. Harper, of Snow Hill, 93 6-7.

3rd. Mary L. Martin, of Davidson, 93 3-7.

The election of officers resulted as follows:

President, Dr. A. A. Kent, of Lenoir.

Secretary, Dr. G. T. Sikes, of Grissom.

The retiring secretary was presented with a very handsome gold watch by the remain-

ing members of the Board, which so overcame him that he was not able to express his thanks and appreciation in words.

The matter of holding the examinations after the Society meeting instead of before was discussed by all the members of the Board, and it was decided that this would be better for the applicants, the Society and the Board. The Board then adjourned to meet in Morehead City in 1907.

Questions asked by the Board at the 1906 Meeting.

Practice of medicine, A. A. Kent, M. D., Lenoir, examiner.

1. Give diagnosis between intestinal colic and localized peritonitis.

2. In chronic dysentery what character of lesions exist and where are they located?

3. Define cerebro-spinal meningitis, giving cause of the disease and anatomical lesions.

4. What is the cause of relapses in typhoid fever?

5. What is meant by the term "gray hepatization" in pneumonia?

6. Define chlorosis and write a single prescription for it.

7. Name the cardiac affections in order of their frequency that complicate acute articular rheumatism.

8. Give medical treatment for acute cystitis.

9. Give treatment for case of pleurisy with effusion.

10. Give briefly medical treatment for a case of chronic interstitial nephritis.

Chemistry, Geo. W. Pressly, Charlotte.

1. Define the following terms, viz: synthesis, equation, valence, dialysis, symbol.

2. Name the colors of the solar spectrum in their order.

3. The physical properties of a chemical element are as follows, viz: An invisible, colorless, tasteless, odorless gas, heavier than air, s. g. 1.10 (air—1), slightly soluble in water, 3 per cent. found in natural water; affinities of great power and wide range, combines with every other known element except fluorin and the argon group. What is the element? What is its distribution in nature?

4. Convert the following to grains and ounces: 3 grams, 30 grams, 500 C. C.

5. Average composition of human and cow's milk.

6. Composition of chalk-stones of gout; of gall-stones or biliary calculi.

7. Given a specimen of urine for examination, name ten things you would do, in their order.

8. What salts are insoluble in warmed urine, but are dissolved on addition of acetic acid?

9. About 1 in. of suspected urine is mixed in a test-tube with ½ inch of a saturated solution of picric acid and ½ inch of liquor potassa. On boiling this yellow mixture for one minute a slight deepening of color may occur in normal urine, owing to reduction by uric acid and kreatinin, but a dark mahogany-red color would denote what?

10. Write name of each formula in the following equations.

C_2H_5OH plus H_2SO_4 equals $C_2H_5HSO_4$ plus H_2O

$C_2H_5HSO_4$ plus C_2H_5OH equals H_2SO_4 plus $(C_2H_5)_2O$.

Physiology and Hygiene, Chas. O'H. Laughinghouse, Greenville.

1. What is the capacity of the normal bladder?

1. What portion of gastro intestinal tract accomplishes the greatest amount of absorption?

3. What color is the blood in the Pulmonary artery, and why?

4. What is the function of the bronchial artery?

5. Name the forces that keep the blood in circulation.

6. What is a vaso motor nerve?

7. In the event you destroy the cyrus fornicatus, what happens?

8. In the event you divide the antero lateral columns of the spinal cord, what happens?

9. Give centre of location of speech.

10. What pathalogical bacteria most commonly pollute drinking water?

Anatomy, Dr. James M. Parrott, Kinston, Examiner.

1. Describe the Atlas and name the bones with which it articulates.

2. Describe the ankle joint, name its ligaments (do not describe them) and name the bones which enter into its formation.

3. Locate and describe the Mitral (left Auriculoventriculo) valves of the heart.

4. Give the relations of the head of the Pancreas.

5. Describe the spongy portion of the male urethra (do not give its histology).

6. Name the nerves which supply the muscles of the eye-ball, mentioning the muscle or muscles which each supplies.

7. Describe the Eustachion tube.

8. Give the relations of the 3rd portion of the subclavian artery.

9. Give the relations of the female bladder.

10. Describe the Median nerve (do not give its relations) and name the muscles or group of muscles it supplies.

N. B.—Answer only eight (8) questions.

Obstetrics, Gynecology, and Pediatrics, Dr. H. M. Fletcher, Asheville, Examiner.

1. (a) Describe a normal ovary. (b) Give symptoms of pregnancy at end of second month.

2. Give etiology, prognosis, symptoms and treatment of concealed accidental hemorrhage.

3. Name risks to mother and child in breech presentations.

4. Give origin and distribution of uterine vessels and nerves.

5. Give causes and treatment of menorrhagia and of metrorrhagia.

6. (a) Give diagnosis of cancer of cervix uteri. (b) Give treatment of chronic cystitis.

7. Give written instructions for artificial feeding of an infant one week old.

8. Give symptoms and treatment of rickets.

9. Give location of lesions and symptoms of poliomyelitis.

Materia Medica and Therapeutics, Dr. J. T. J. Battle, Greensboro, Examiner.

1. State the physiological action of Opium; Dose of Ext; Tr. and Camph. Tr. Mention two most important alkaloids and dose of each. Antidotes in case of poisoning.

2. Give dose of Tr. Aconiti; parts used, physiological action.

3. Dose of Caffeine; its action upon the system.

4. Explain laxative action of Magnesii Sulphas; Oleum Ricini; Aloe; dose of each.

5. Principal alkaloid of Pilocarpus; dose and physiological action.

6. Physiological action of Acidum Carbolicum; dose; chemical antidotes.

7. Explain action of Apomorphinæ Hydrochlor; dose. From what is it made.

8. State the effect on the heart of medicinal doses of Nitro-Glycerine; Digitalis; and Strychnia.

9. Physiological action of Physostigma; dose of Tr.; name the principal alkaloid and dose.

10. Physiological action of Oleum Terebinthinæ; dose; symptoms of overdose.

If any reasons why the following prescriptions should not be used state them:

——11——

1. Pot. Iod. Spts. Aetheris Nit. Aquae.
2. Pot. Permang. Glycerinae. Aquae.
3. Morphiae Sulph. Aq. Lauro Cerasi.
4. Basham's Mist. Tr. Digitalis.
5. Pot. Iod. Acid. Nitro-Hydrochl. Tr. Cinch. Co.
6. Am. Chloridum. Syr. Sciliae.

——12——

1. Am. Carbonat. Syr. Scillae.
2. Pot. Iod. Coros. Subl.
3. Pot. Chlorat. Acid. Tannic.
4. Quin. Sulph. Sodii Salicyl. Acid. Sulph. Aquae.
5. Am. Chlorid. Pot. Chlorat. Aquae.
6. Strych. Sulph. Potassii Iod. Syr. Sarsap. Co.

Answer any ten questions, No. 1 included.

Examination in Surgery, T. H. Russell, Wilmington.

1. Give the diagnosis of suppuration.

2. Give the causes of gangrene.

3. Define (a) septic intoxication (b) septicemia (c) pyemia.

4. Give symptoms of internal hemorrhage.

5. Give symptoms and treatment of fracture of middle 1-3 of femur.

6. Give symptoms of fracture at base of skull.

7. Give causes of intestinal obstruction.

8. Give symptoms of acute perforating appendicitis.

9. Give symptoms and treatment of ischiorectal abscess.

10. Give causes of retention of urine.

Review of Southern Medical Literature.

Atlanta Journal Record of Medicine, April, 1906.

Causes of Loss of Confidence in X-Ray Treatment.—Dr. M. B. Hutchins says we must in weighing the value of X-Rays compare their successes and failures fairly. Would you expect me to have as good a record in appendicitis work as the men who have perfected the technique of this treatment? Could the oculist get as good results in typhoid fever as you general men? Could you do cataract work as well as they? In estimating results we must consider the training of the operator. Men with no knowledge of skin disease or cancer went into the X-Ray business—that is the name—and to their sorrow. They got some good results, but men competent enough in other lines began to have disasters, not only in utter failure to cure but in producing destructive injuries, some even resulting in X-Ray burn-cancer. Deep-seated cancer is incurable. Every man who takes a case should give all parties interested to understand that the treatment is but a hopeful struggle against a hopeless disease. The operator must know his machine, his tubes, and, as far as possible, their variations. Then he must know the pathological conditions he treats, the susceptibility of the different tissues and of different people and to be able to distinguish between an X-Ray

burn and aggravation or progression of the disease. It seems to me that a doctor has gone a long way towards being safe when he gets to know what he can't do. There is a lot we can't do with X-Rays, there is much that can be done and a great deal that we should never dare try to do. Upon my mind is the weight of depressing evidence of X-Ray failures of my own, but failures honestly made, on cases in which my hopes were equal to or greater than those of my patients. On the other hand is the record of much good done by this treatment, cures or added month of life and interest in it and the gratitude of some few. So gentlemen let us give X-Rays their fair and proper place as a valuable aid in our therapeutics, and when tempted to decry them as useless turn to our old friends mercury, quinine, alcohol, antitoxins and opium, and ask if they have ever failed or if their pathway through the years shows only the flowers of success with no headstones marking failures.

Texas State Journal of Medicine, April, 1906.

Removal of the Uterus, Ovaries and Tubes for Epilepsy.—Dr. C. E. Cautrell believes that where it becomes necessary to remove both tubes and ovaries in neurotic patients that it is best for the patient to take the uterus also, especially if this can be done by the vaginal route, and gives the following reasons: 1st. On removal of both the ovaries and tubes menstruation will stop and the uterus if left undergo atrophic changes of the menopause. A large portion of the blood supply is cut off, as the uterus cannot receive blood from the ovarian arteries after the removal of the adnexa from both sides. These are not the largest vessels but the most direct from the aorta. On this account the changes will be prolonged and the nervous symptoms much more severe after operation than if the womb be removed also. 2nd. I have never examined a woman who had lost the adnexa on both sides that did not complain of more or less uterine discharge and was worried for fear that it would never stop. This is a drain on the system that does not exist when the womb is removed. 3rd. It has been my experience that where the anatomical changes are great enough to require the removal of both adnexa hysterectomy by the vaginal route is not as severe an operation as the laparotomy required for the removal of the adnexa by the abdominal route. 4th. The period of convalescence is very much shorter, the fear of uterine displacement entirely removed, the secondary symptoms less severe, a point to be gained in the class of cases reported in the paper.

Gaillard's Southern Medicine, April, 1906.

Headache and Neuralgia from troubles in the Nose and Accessory Sinuses.—Dr. J. A. White believes that headache is such an annoying trouble to the practitioner meeting it, as he does, at every turn and its causes so obscure in so many cases that the doctor has often a hard time to solve the problem as to what is best to give relief. Of course headache can always be relieved temporarily by anodynes, but that does not give the cure the patient expects. Leaving out ocular cases with the various refractive and muscular errors of the eyes which bring about strained accommodation and imperfect muscular balance many pathological conditions in the nose can produce reflex irritation of the trigeminal branches and cause these nervous headaches. A careful examination of these spaces even in patients who are thoroughly satisfied there is nothing in the nose will demonstrate enough trouble to cause some irritation. A bad cold in the head is often accompanied by headache and neuralgia as the result of nasal obstruction which brings about this reflex effect of direct pressure and irritation of the terminal branches of the trigeminus. Frontal headache and temporal neuralgia and pain in the upper jaw and teeth may be the result of the application of chromic acid to the middle turbinate. If this slight irritation would produce such a condition how much more natural it is to expect the same or worse results from continual pressure of an enlarged turbinate? All these conditions can exist without the patients having the slightest idea of any nasal trouble being present, because if they can breathe fairly well through the nose and have no discharge from it they naturally conclude there is no trouble there. Even cases of adenoids without any trouble in the nose are often known to produce headache, especially pain in the top of the head. Trouble in the ethmoid cells, especially in the frontal sinus, produce severe headaches which are sometimes agonizing.

The Mobile Medical and Surgical Journal, April, 1906.

The Present Status of Surgery of the Stomach.—Dr. I. L. Watkins says no more serious catastrophe can befall a man than an acute perforation of the stomach. The onset of the symptoms is usually sudden and their character is dependant somewhat on the character of the ulcer and the condition of the stomach whether it is full or not. The symptoms produced by perforation are the same as those of traumatic rupture. Intense pain at first—usually located in the immediate vicinity of the opening in the stomach. The muscles are usually fixed

and the pulse small and rapid. The symptoms pass rapidly into that of general peritonitis. The mortality given in various statistics varies greatly in these cases. It is probable that about one-half of these cases die as the result of the perforation. The treatment is to open the abdomen, find the perforation, stop the hemorrhage and close the perforation. It is usually necessary to do a gastro-jejunostomy for the purpose of relieving the condition which resulted in perforation. The treatment of acute or chronic ulcer in the stomach is yet regarded as a condition which may be relieved by non-surgical means. Just how far we may carry the palliative treatment is not settled. That some casse may get symptomatically well I do not deny, but I am frankly of the opinion that most of the cases so treated will sooner or later become appropriate subjects for operation. In acute ulcers it is wise to wait a while before operating, as they not infrequently make a complete recovery. Should attacks of hemorrhage occur frequently it is best not to delay operating, as they will undermine the health of the individual. In chronic ulcers there is always a condition such as stenosis and dilitation with the consequent retention of food, which makes drainage necessary before relief can be expected. In these cases delay is useless and to do so means that your patient will likely try some other doctor. Perforation of the duodenal ulcer is so clearly allied with the stomach ulcer that they are usually considered together. The conditions and symptoms differ in some respects. At first the symptoms are practically the same, but after the first shock passes off the signs are very dissimilar. The clinical picture of a duodenal perforation resembles very closely that of appendicitis. The symptoms are principally in the right side.

The American Practitioner and News, April, 1906.

Conjunctivitis.—Dr. Geo. A. Robertson says that in our school for the blind twenty-five per cent. of the cases give a history of purulent opthalmia, and twelve to fifteen per cent. are trachoma cases, about one blind to every 940 inhabitants; the average all over the United States is one in every 1200. When from thirty to fifty per cent. are caused by gonorrhoea and trachoma it means that one person in every 2500 or 3000 people becomes blind because of this disease. Gonorrhoeal opthalmia yields to careful treatment, and prophylactic measures are certain to prevent it. Trachoma is harder to manage and much more slow to yield, but also amenable to treatment. There are many cases of defective vision not classified as blind who yet are debarred from a large number of occupations and whose earning capacity is lowered till they depend in a large degree upon public charity. If two preventable diseases cause so large a percentage of blindness what conclusions do we draw: 1. That the danger of these diseases causing blindness be impressed upon the public. 2. That we ought to make a routine practice of using Crede's method in every new-born child. 3. That since the government is sending back to their native shores all immigrants that are suffering with trachoma we ought to deal vigorously with every case of trachoma in our own country. 4. That all these cases should be registered and put under rigid observation and control. 5. That we as a profession are responsible if the number of blind in this country does not decrease. Census 1900. Blind, 50,368; blind in one eye, 93,988; population, 76,303,387.

Texas Medical Journal, April, 1906.

Human Hair in the Stomach.—Dr. S. S. Rather reports the following case: Girl, seven years old, thin and anemic, vomiting everything that was put in the stomach. Vomiting continued for ten days and finally improved. Stomach was easily palpated and felt as hard as wood. About Jan. 1st she was taken with another attack which was more severe, this time nothing passed the stomach. Gave one-half ounce of castor oil every three hours for a day or two. After five doses tumor moved to lower bowels. Kept up oil one day more and tumor moved to lower bowels and found it to be her own hair. It was in three or four rolls two inches in diameter and eight inches long, matted and tangled in such a way that it was very hard. Had little or no feces mixed with it. The mother now remembers that five years ago she was compelled to clip the child's hair short to keep her from eating it. The child acknowledged that she had a craving for it and would secret herself and eat great quantities of it, but claims she has not eaten any since her hair was clipped.

Southern Medicine and Surgery, April, 1906.

Dr. W. E. Taylor reports this treatment as follows: Some years ago Richet, the great French physiologist, conceived the idea that since the bromides have a sedative action on the nerve cells in epilepsy and kindred diseases it would not be illogical to replace the chloride of sodium usually appropriated by the animal economy in part at least by potassium and sodium bromide and thus bathe the cell continuously in a soothing solution. The tentative adoption

of this idea in practice proved more successful than he had hoped, since certain cases of epilepsy and "petit mal" responded to this substitution under certain conditions in a most marvelous way. The cases which furnish the most brilliant results are those appearing after a number of years of immunity in children of alcoholic parentage. Favorable results were also observed in patients where attacks were induced by excitement, and especially in those predisposed cases that suffer through overeating or indigestion. If now, reasoned Richet, we can largely avoid common salt in the food and season with bromide of sodium or potassium we may diminish this instability and the equilibrium of the cell itself will not be easily upset. He selected several cases of epilepsy in children of alcoholic parentage in whom the aura was the occasional manifestation of some dietary indiscretion. He placed them under a rigid dietary discipline. This consisted of a diet ordinary in every way save that no sodium chloride was permitted in any of their food. Everything in which salt usually enters was specially prepared for them and potassium bromide substituted as a seasoning. In bad cases a teaspoonful of bromide solution was given additional to this three times a day. The results in these selected cases was uniformly the same. The patients had possibly one or two attacks before the treatment was well installed, but these soon ceased and they continued quite well as long as the dietary substitute was maintained. A few very bad cases where consciousness was lost as often as eight or ten times a day were freed from attacks entirely after two or three weeks and remained free as long as treatment was carried out. Some cases which would not respond to any quantity of bromides alone yielded to this combination treatment in a most gratifying way. This treatment if carried out too rigidly for too long a time causes faulty nutrition, and if stopped the old attacks recur. Therefore the end now desired is to find a mean between an absolute Richet treatment and ordinary diet. One often finds that such a mean can be obtained as above referred to simply by using a bromide instead of salt to season ordinary cooking. Sometimes it may be necessary to cut out dark meats which contain large quantities of salt and season the remainder with bromide. But this mean must be found by the physician by experimentation. Many cases depend upon organic imperfection and for these the prognosis is as hopeless as for absolute idiocy.

The Medical Recorder, April, 1906.

Extreme Case of Bright's Disease Relieved by Edebohles Operation.—Dr. W. Cautrell was called to see Miss L. and found her in extreme convulsions, which were followed by coma lasting several hours. On examination of the urine found evidence of Parenchymatous Bright's Disease. She has been in bed most of the time for four years. For more than twelve months her illness was a succession of storms of extreme convulsions and coma. After the first year of her illness she fell into a somewhat uniform state of health, and for the succeeding three years passed an average of nine ounces of urine a day, never voiding urine oftener than once in twenty-four hours, usually once in forty-eight. She has frequently had haematuria convulsions, and muscle spasms have been constant symptoms. Her sight was almost lost. Her pulse has been about 150 for the past three years. Any diet seemed bad for her. She has never had more than compensating oedema except a marked oedema of the lungs sometimes. During extreme paroxysms the only thing that seemed to relieve was acetate of potash, infusion of digitalis and pilocarpine. The author after obtaining family consent performed an Edelbohle's operation. The anaesthetic was borne well and the patient reacted readily, and was not at all nauseated, has not had another convulsion and the stomach has not been burdened with the elimination of urea, the evuctation of gas not having returned. Since operation her average elimination is more than twenty-five ounces per day, the amount of albumin casts and epithelium greatly reduced, vision very much better, appetite returned, and can eat a variety of food. She menstruates regularly. Her improvement is progressive and general. The author believes that the select cases are those of parenchymatous nature, moveable kidneys that are inflamed, badly adherent kidneys, and the acute cases of suppression without obstruction. Idiopathic haematuria and nephritis following trauma statistics place the interstitial cases in the contraindicated list. The future may also teach us that operation in acute cases will spare the development into chronic Bright's Disease.

Virginia Medical Semi-Monthly, April 13th, 1906.

The Diagnosis of Inflammatory and Ulcerative Lesions of the Penis and Scrotum.—By Dr. Paul LaRoque.

The Virginia Medical Semi-Monthly, April 27th, 1906.

Principles of Surgery, Abscess—Acute and Chronic—Etiology, Pathology, Diagnosis, Prognosis and Treatment—Phlegmonous Inflammation with Suppuration—Varieties, Causes, Pathology, Symptoms, Diagnosis, Prognosis, Treatment.—By Dr. Stuart McGuire, Richmond, Va.

Treatment of Renal Calculi and Pyelitis.—Dr. L. C. Bosher says the distressing attacks of renal colic are most promptly relieved by prolonged hot baths, hot opium or belladonna fomentations to the lower abdomen and the use of morphia hypodermically; chloroform and ether inhalations should be resorted to, however, when morphine fails to give relief. The acidity of the urine may be neutralized by the citrates and tartrates of potash and soda In the medical treatment of renal calculi restriction of albuminous and saccharine articles of food, avoidance of constipation and the free use of pure waters containing alkalies will limit, modify, and sometimes prevent the formation of calculi in the kidney. Patients then suffering from lithiasis should be instructed to eat sparingly and carefully, avoiding dark meats, sugars, highly seasoned and spiced foods, tomatoes, asparagus, strawberries, and alcoholic drinks, especially burgany, champagne, and malt liquors A stone of any considerable size cannot be dissolved by medical treatment, but small concretions may be mechanically washed down into the bladder. The albuminous frame work of a uric acid calculus it is claimed may be dissolved by piperazin in five grain doses taken in a pint of water three times a day, so also urotropin may have some effect upon phosphatic calculi. The free use of pure spring water to keep the urine abundant and of a low specific gravity will be of decided service to the patient. Repeated attacks of renal colic, deterioration of the general health, blocking of the ureter or pyogenic infection of the kidney cells for the operation of neophrolithomy. This step should especially be advised when the pain is persistent and severe (requiring the use of an anodyne) and accompanied by frequent attacks of renal colic and gradual emaciation and loss of strength. Some surgeons are in the habit of performing a primary nephrectomy in case of calculus pyonephrosis, especially when the sac formed is large. The surgical treatment of calculous anuria calls for a removal of the calculus by an operation; or if this is not possible for the establishment of an artificial outlet (lumbar renal fistula) for the urine. A ureterotomy may later be successfully performed when the fistula may be allowed to close. In the gravest cases a nephrotomy is indicated to prevent death from uremia. All surgeons who have had much experience with kidney surgery have seen persistent renal symptoms, especially harmaturia, pain, and recurrent renal colic, disappear under a nephrotomy, although no stone or other cause could be found at the time of the operation to explain these symptoms.

New Orleans Medical and Surgical Journal, April, 1906.

Remarks on Abscess of the Liver.—Dr. L. Sexton draws up the following conclusions: Abscess of the liver may follow malaria and typhoid fever on account of the congested condition of the liver occasioned by these diseases. We may have abscess of the liver with absence of fever, dysentery and jaundice.

Aseptic aspiration is the only positive way of clearing up a diagnosis of pus in the liver. The finding of malarial plasmodium in the blood or the amoeba coli in dysenteric stools aids in the diagnosis.

With perfect adhesions, no leaky drains, the prognosis in single tropical abscess of the liver should be favorable.

Free drainage without irrigation is the safest rule in treating abscess of the liver. Perhaps dysentery as a cause of liver abscess has been exaggerated, as it may be a coincidence in some cases instead of a real cause.

The Insanity of Epilepsy.—Dr. E. H. Hummel under the heading "The Epileptic Disposition" says very few of these unfortunates are amiable or "good natured" at their very best. Most of them are morose pessimistic Ishmaelites. The tendencies color their insane moods as well. In asylums they are frequently offenders against discipline and most disagreeable to their associates. At certain times they exhibit an obstinate, apparently resentful manner toward everybody and everything. For instance, it is frequently very difficult to treat their injuries received from falls and convulsions, as they are most prone to disarrange the dressing and appliance as fast as it is readjusted—especially if told not to do so. They bicker and nag at other patients about them. Under these circumstances some of them can be ingeniously mean—as the meanness of irresponsible persons is rated. All the time their religious pretentions may be extreme. I have in mind a patient who spends much of her time reading the bible and singing psalms. She nevertheless is nearly always in a personal encounter with one of her fellow patients. Because of their peculiar affliction anything simulating ordinary consistency is practically never the trait of an insane epileptic. Many of them are given to pilfering all sorts of articles. Unable to get hold of anything of value they will gather worthless trash of every description to conceal about their rooms and bedding. There is usually a big row when they are robbed of such stuff. Utterly without the sense of ethical considerations they by a kind of atavistic instinct indulge in the habit of appropriat-

ing everything in sight. Many of these obliquities are insane traits, of course, but I have mentioned them just here to indicate the tendencies grosser offenses are apt to take.

The Southern Practitioner, April, 1906.

Uremia.—Dr. D. R. Neill regards the diagnosis of uremia as sometimes extremely difficult, however, if we get a clear history of a previous disease affecting the kidneys with arterial tension, increased second sound of the heart, albuminous urine and the odor of urine on the breath with, in some cases, a dropsical tendency we may expect it, and to this add convulsions, delerium and coma and we have a fair clinical picture of uremia. Uremic unconsciousness coming on suddenly may be mistaken for one of a number of conditions due to other causes. Cerebral hemorrhage if not carefully studied may be mistaken for uremia, but if we are close observers we cannot fail to see that the stertorous, heavy breathing, puffing cheeks of hemorrhage differ much from the sharp, hissing stertor of uremia. Paralysis follows hemorrhage which is wanting after uremia, and the uremous odor of the breath is wanting in the former. In cerebral hemorrhage the unconsciousness is absolute while in uremia the patient in some cases can be partially roused depending on the gravity of the coma, and by carefully inquiring we may find that the coma came on gradually, which rather points to uremia. If convulsions develop at all in hemorrhage they are late, but frequently uremic coma is ushered in by violent headache and convulsions. The stout fleshy build of the apoplectic with short thick neck and florid complexion is noticeable in contrast with the pale sallow and edematous features of the uremic patient.

From alcoholic narcosis we should have no trouble in differentiating uremia by the absence of the sharp, hissing, stertorous breathing and convulsions of the latter and the presence of an alcoholic odor, injected conjunctiva, previous history narcosis only partial, and feeble quick pulse of the former. In opium poisoning the pupils are sharply contracted and do not respond to absence or presence of light, while the breathing is full, deep, and quite slow, and the patient may be partially aroused. In diabetic coma we should get a full history of the case. note the emaciation, the harsh, dry condition of the skin and etherial odor of the breath and the presence of sugar in the urine.

The supreme indication in the treatment is the prompt elimination of the poison and we know that whatever the toxin is if we can get the kidneys to eliminate the normal amount of solid constituents of the urine we will be able to overcome the disease. Diaphoresis and catharsis should be given a prompt trial. A warm room, hot baths, and these failing medical diaphoretics as pilocarpine with heat added will cause free diaphoresis. Of course we must be careful of the heart's action while using pilocarpine, but I believe we can give from 1 8 to 1-6 of a grain safely. Hydrogogue as well as saline cathartics must be given to the extent of opening the bowels freely and promptly If these fail venesection may be tried, but I question its value. The use of normal salt solution intravenously or by hypodermoclysis has been advised and used with splendid results in connection with catharsis and diaphoresis in cases of profound weakness bordering on collapse.

The Southern Clinic, April, 1906.

Skunk Cabbage.—Dr. J. A. Burnett says it is not often that skunk cabbage is mentioned in a medical journal and many physicians do not know hardly anything about it. The synonymus for skunk cabbage are as follows: Skunk weed, pole cat weed, meadow cabbage, icotiedes fortida, arum Americanum, dracontium foetidum and symplocarpus foetidus. The most appropriate is symplocarpus foetidus (Salisbury). Its odor is somewhat like the odor of a skunk, hence its common names: skunk weed, pole cat weed and skunk weed. The root and seeds are the parts used in medicine. It grows in wet land. The dose of the fluid extract is estimated at 10 to 40 minums. Thatcher speaks of two patients taking two teaspoonfuls of the powdered root every morning and were cured of dropsy. He also speaks of the seed being of more value in asthma than the root. Skunk cabbage is stimulant, antispasmodic, emetic, nervine, expectorant, and some say narcotic. Skunk cabbage has given good results in some cases of asthma after other remedies have failed. Many coughs can be relieved with it when an expectorant is needed; also spasmodic coughs. It has been used in tuberculosis, and no doubt would be of some value in certain mild cases for temporary effect at least. It is useful in whooping cough as well as ordinary coughs. It is a very good antispasmotic, has been used in puerperal convulsions with good results. It has been used in hemorrhage from the lungs, in hysteria, nervous irritability, chronic catarrh, rheumatism, dropsy, peilepsy and bronchial affections. It has been used externally over tumors, swellings, etc., to "scatter" them, ease pain, and to stimulate granulation. Large doses will cause vomiting, headache, vertigo and dullness of vision, It is not considered a poison by

most physicians, at least it is used by the most strict physio-medical physicians and they claim to exclude all poisonous drugs from their practice.

Maryland Medical Journal, April, 1906.

Thirty-five years of Treatment by Seventeen Physicians for Strabismus, Tuinitis, Headache, Indigestion, Eye Strain, etc.—Geo. M. Goulds sums up as follows: 1. It should be noted that at first there was the strabismus during childhood and youth as the only symptom, although others unchronicled might have existed. That strabismus was neglected for six years. Of course ametropea produced it. Already the lid was ptosic; nature was covering the eye and turning it in to be rid of the bad image which optical science could have made a useful and fusing one. Opthalmology preferred to give goggles—blue, brown, and green with a hole in one eto rather than to help nature in her fundamental difficulty. Later of course operation was demanded.

2. It is marvelous that nature up to, through, and after the operation preserved this man's perfect acuteness of vision after a high hyperopic astigmatism has existed up to 13 years and then is succeeded by a strabismus of six years the eye is almost always ruined for visual purposes.

3. This obstinate preservation of acuteness of vision was the reason of the man's equally obstinate reflexes, and his rugged health enabled brain, ear, nose and digestive system to withstand the awful insults of 35 years and still not degenerate into organic disease.

4. Most noteworthy is the fact that as prestyopia was approaching the symptoms and organs affected multiplied and the intensity of the symptoms increased.

5. The glasses worn by the patient when he came to me did not correct his astigmatism. The prisms incorporated in them under these circumstances and the hyperopic correction also not only could not aid the gluims of the eye to overcome her difficulties but positively increased them. Nature was struggling to get a perfect image on that retina and as it was impossible was turning it aside to be rid of it, as she did in the cases of Dr. Quincey Wagner and thousands of others. Instead of giving the correct image the occulist may as here prevent the exclusion of the eye from vision (as he also does in all tenatomies for herterophoria and strabismus) or make her work harder to turn the eye again or force her to extinguish the image in the brain.

6. If this patient had been a woman or even a man of less energy or rugged health re-establishment of health after 35 years of suffering would have been only partial or more probably impartial. Therein lies the fallacy of crying "Exaggeration," "The oculist failed," etc. Before a woman could reach 40 with such a set of reflexes she would perhaps have been operated upon for aural or laryngeal disease, and surely she would have had her appendix removed together with her uterus and ovaries. Even if not so she would have drifted into chronic invalidism sanitarium life or would have died by those executioners of the functional diseases which we call infectious or organic.

Nashville Journal of Medicine and Surgery, April, 1906.

Items of Interest.—Dr. E. S. McKee says that Judge Green of the New York City Courts for the first time in our legal history defends the practice of medicine. His definition has been made with great care and is well worth attention. "The practice of medicine is the exercise of the performance of an act by or through the use of anything or matter or things done, given, or applied, whether with or without the use of drugs or medicine, and whether with or without a fee therefor, by a person holding himself or herself out as able to cure disease, with a view to relieve, heal or cure, and having for its object the prevention, healing, remedying, cure or alleviation of disease." A very clear and concise definition of what constitutes the practice of medicine. It hits faith curists, mind curists, and all irregular pathies. President Faunce, of Brown University, in a recent address before the Rhode Island Medical Society, says, "In two respects the medical profession deserves the grateful recognition and regard of all other callings in modern life. It has always been insisted that the practice of medicine is a profession and not a trade. Trade is an occupation for livelihood, profession is an occupation for the service of the world. Trade is occupation for joy and result; profession is occupation for joy in the process. Trade is occupation where anybody may enter; profession is occupation where only those who are prepared may enter. Trade is occupation taken up temporarily until something better offers; profession is occupation with which one is identified for life. Trade makes one the rival of every other trade; profession makes one the co-operator with all his colleagues. Trade knows only the ethics of success; profession is bound by lasting ties of sacred honor."

Book Notices.

Transactions of the American Pediatric Society, held at Hotel Sagamore, Lake

George, New York. Seventeenth Session. June 19th, 20th and 21st. Edited by L. E. La Fetra, M. D. E. B. Treat & Co., Publishers.

This attractively bound volume has 228 pages of carefully prepared matter. The papers presented cover a wide range of thought and experience, and a number of subjects are illustrated. It is an excellent piece of work.

The Cause and Prevention of Dental Caries. By J. S Wallace, M. D , D. Sc., L. D. S.; Dental Surgeon for West End Hospital for Nervous Diseases, and Assistant Dental Surgeon, National Dental Hospital, London. Bailliere, Tindall & Cox, London. Price 2 6, net.

This is the fourth volume, on irregularities of the teeth, by this well-known author and it is made up of essays which have appeared in prominent English journals. It will doubtless prove a fitting supplement to the books that have preceded it.

Squibb's Materia Medica. A Handbook for the Physician and the Pharmacist. E R. Squibb & Son, New York.

A descriptive list of the products of E. R. Squibb & Son in convenient shape.

Childhood and Growth. Lafayette B. Mendel, Professor of Physiological Chemistry in the Sheffield Scientific School of Yale University. Price 67 cents, postpaid.

This was prepared and read before the New Haven Mother's Club, October 6th, 1905. The editor, Horace Fletcher, says in his preface:

"It is by an eminently careful physiologist whose specialty tends towards the chemical side of the science, and who is unprejudiced either by parentage or tradition in his estimate of the subject of Childhood and Growth."

Christobel's Secret. A Story of a Young Girl's Premonitions. Mary E. Lord. The Grafton Press, New York City.

A rather hysterical portrayal, with a homeopathic dose of Christian Science thrown in—the kind of a book for which there doesn't seem to be any demand, and one wonders how it ever came to be written or published.

Margaret Purdy. Walter Henry Keen. The Broadway Publishing Company, 835 Broadway, New York.

Margaret Purdy began life as maid of all work in an East-side family; was married at seventeen to a vagabond; after the birth of her baby she went to a factory; was injured there and afterwards became the assistant to a chemist; by him she was trained, and became a beautiful, strong woman; then after a scene in the chemist's library that is unworthy of the book he declared his love for her and Margaret left his house; that night he was murdered; the vagabond husband was suspected, and then follows a series of court scenes, suicides, deaths, etc. There is no literary merit, and the one redeeming feature is the evolution of the ignorant girl into a woman of position, through her own industry and ambition.

Transactions of The American Roentgen Ray Society. The Sixth Annual Meeting, Johns Hopkins Hospital, Baltimore, Md. September 28th, 29th, 30th. 1905. Murdoch, Kerr & Company, Pittsburgh, Penna.

The President's address on the Past, Present and Future of the Roentgen Ray is full of suggestive thoughts. Other addresses are on Roentgenography in Diseases of Stomach and Intestines, The Development of The Elbow, Roentgen Diagnosis of Diseases of the Lungs, Diagnosis of Thoracic Aneurisms, The Regulation and Measurement of the Therapeutic Dose of the Roentgen Ray, Ante- and Post-Operative Treatment of Cancer of the Breast, Treatment of Sarcoma, The Roentgen Rays in Military Surgery, and Effects of the Roentgen Rays upon the Tissues and Blood.

This report will be of much assistance to the workers who are making investigations in this line. The illustrations, charts, tables, etc., add to the practical value of the book.

Humaniculture; Hubert Higgins, Demonstrator of Anatomy at the University of Cambridge, England, and Assistant Surgeon to Addenbrooke Hospital, Cambridge, England. The Frederick A. Stokes Company, New York City. Postpaid, $1.32.

This is the result of Dr. Higgins' investigation of what is known as Fletcherism, which is, boldly stated, an assertion that if natural aptitudes are trusted and the incomplete instructions and false teachings of degenerate habits are forgotten, there is little difficulty in maintaining health. The primary and essential condition for scientific adaptation to environment, is to secure natural environment, including optimum nutrition. Dr. Higgins was in very poor health and had run the course of consultation with his professional colleagues, with no permanent relief, when Horace Fletcher arrived in Cambridge to submit himself to careful physiological examination under the direction of Sir Michael Foster. Dr. Higgins volunteered as a check subject in the experiments, and became cured of his disabilities in a remarkable manner.

As a student of sociology, Dr. Higgins saw an element of usefulness in what he has aptly termed humaniculture, and he resigned his appointments in order to give unre-

mitting attention to the scientific teachings of the phenomena.

A Treatise on Surgery. Volume 2. By George R. Fowler, M. D., Examiner in Surgery, Board of Medical Examiners of the Regents of the University of the State of New York; Emeritus Professor of Surgery in the New York Polyclinic, etc. Imperial octavo of 725 pages with 888 text illustrations and 4 colored plates, all original. Philadelphia and London: W. B. Saunders Company, 1906. Per set: Cloth, $15.00 net; half morocco, $17.00 net.

In our April issue, we expressed our pleasure in the appearance of the first volume of this authoritative work. As the first book treats of general surgery, this second part, the really clinical portion, is devoted to regional surgery. Herein the author especially endeavors to emphasize those injuries and surgical diseases that are of the greatest importance, not only because of their frequency, but also because of the difficulty of diagnosis and the special care demanded in their treatment. Throughout special attention has been given to diagnosis, the section on laboratory aids being unusually excellent. The illustrations are elaborate and original; the mechanical excellence of the publication is especially commendable; nothing has been spared to produce a book that will be a valuable addition to any physician's library. The complete index at the end will greatly increase the usefulness of this set of books, which will take its place among the standard works in this branch of medical science.

This Hazardous Life of Ours.

Bad as the earthquake was, the whole country ought to understand clearly that San Francisco's chief disaster was due to the fire. Thousands, if not millions, of people have been asking whether or not it was going to be safe to rebuild San Francisco, in view of its liability to what the scientific men call "seismic disturbance." This is really something like asking whether or not it is worth while to build cities and towns in Kansas, Iowa, Nebraska, and adjacent States, because destructive tornadoes from time to time visit that general region and do local violence. As these pages were closing for the press, immense forest fires were raging in northern Michigan, and in sections of Wisconsin. A number of villages and towns were said to have been burned, and the very considerable city of Escanaba was reported in imminent danger. Flood, drought, fire, earthquake, volcano, epidemic, tornado, blizzard, tidal wave, cyclone, monsoon, hot wave—every section of the land, sooner or later, suffers from some visitation of nature that departs so far from the normal as to cause great suffering and loss. The powers of nature are so profound, and the possibilty of some exceptional scourge is a thing so ever-present, that it is a very hazardous affair to be alive at all on any square mile of this lovely, but harassed planet of ours. The prophet who claims to have predicted San Francisco's disaster has now affixed the date for the dreadful calamity that is to overwhelm New York. The fact is that California is probably as safe a State to live in as any other. Its equable climate and general salubriety gives it advantages which most States do not possess under the law of averages. Of San Francisco's financial losses, it may be roughly guessed that less than 5 per cent. are due to the earthquake and more than 95 per cent. to the fire.—From "The Progress of the World," in the *American Monthly Review of Reviews* for June.

An Entertaining Early-Summer Magazine.

The June *Lippincott's* opens with "Two in a Fog," a complete novelette of compelling interest by William H. Babcock. This is a story of love and adventure around the oyster-beds of Chesapeake Bay, a field which has not been over-worked by the fictionist and which abounds in material ripe to his hand. "Two in a Fog" opens in a fog and closes in a fog—yet its quality of humor is bright enough to penetrate even the atmosphere that has made London famous. Mr. Babcock's books "The Tower of Wye" and "Fort Kent Manor" met with much success, and their implied promise is amply fulfilled in this new novel.

Beulah Marie Dix is one of the coterie of girl-writers, of which Boston boasts. Her contribution to the June *Lippincott's*, "Edge o' the World," is a deeply dramatic "Glanby" tale. "Betty: Alias Nellie Neville," by Sarah Chichester Page, is a delicious Southern home story of charming setting and delightful people, told by a bright Southern woman. A jolly Irish story, "Peter O'Forus," by Margaret Sullivan Burke, deals with a confusion of sweethearts through the innocent intervention of a kite. "Art or Nature?" is another one of the popular "Miss Lucy" stories of child-life which have appeared from time to time in *Lippincott's*. Lucy Copinger, the author, is a Baltimore school teacher of marked originality. Colonel Willard French, U. S. A., tells of an incident in the Australian bush under the title, "In the Court of Last Resort." His description of a rain-storm is masterly and his plot vigorous. A new instance of the power of love over a crusty woman-hater is portrayed in Katherine L. Mead's story, "His Trial Trip."

Booker T. Washington's anecdotic and

informing article on "Land Hunger in the Black Belt" is significantly hopeful in trend and his evidence is convincing.

A paper of interest to travelers, past, present, and future, is that one by Addison May Rothrock about "The Cafe Procope," an historic restaurant in the Paris Latin Quarter, where the boy Napoleon passed many an hour while yet a student of military art.

Among the poets represented this month are Marie Van Vorst, Thomas S. Jones, Jr., and Theodosia Garrison; while the "Walnuts and Wine" department (or the "back garden," as a distinguished writer has dubbed it) blooms with fresh jokes that belong to the blossom season.

A SAFE FORM OF SWINDLING.

Institutions Combine to Protect the Fraudulent Bucket-Shop Keeper.

"Yet, because the bucket shoppers simulate respectability," says Merrill A. Teague in "Bucket Shop Sharks," in the June *Everybody's*, "they are permitted to perpetrate their swindles with virtual impunity. Banks solicit his accounts. Newspapers are eager to print his advertisements. Proprietors of office buildings importune him to become their tenant. The telegraph and telephone companies furnish him with every facility to thrive by theft. Regular exchanges seldom punish members who maintain 'underground' connections with the thieves of the bucket shopping class. And, as though the immunity they enjoy were not otherwise broad enough, the United States affords to the bucket-shopping thieves freest use of the mails, albeit investigation by postal inspectors would invariably show up the fact that such use of the mails is fraudulent."

Abstracts of the Leading Articles of the Month.

The Sahli Desmoid Reaction.

Eicheler (Berlin. Klin. Wochenschrift) conducted a series of observations on some thirty patients with a view to testing the value of Sahli's desmoid reaction. This reaction is based on the fact that raw connective tissue fibres are digested in the stomach only and there when the secretions of pepsin and hydrochloric acid are relatively normal. Sahli recommended the ingestion of small rubber bags containing methylene blue, and the bags tied shut with raw catgut. As soon as the catgut is disgested the methylene blue or iodoform is liberated and soon makes its appearance in the urine. It should appear within twelve to eighteen hours. If the secretions are not up to normal, then the catgut is either not digested at all and the little bags are expelled with feces, or is digested very slowly and the methylene blue makes its appearance in the urine at a much later period. He found in his series of investigations that the Sahli method is very reliable and corroborated his findings by a comparison with the chemical findings in the stomach contents.

Treatment of Cancer of the Uterus.

Wertheim (British Medical Journal) states that after a preliminary treatment per vaginam by curetting and burning with Pacquelin's cautery, and after minute disinfection the patient is placed in the Trendelenburg position, and the abdomen opened by a median longitudinal incision. By dividing the posterior layer of the broad ligament the ureters are exposed. Avoid isolating them all around and spare as much as possible their surrounding vascular network. After dividing the peritoneum, the bladder must be separated from the uterus. Then ligature and divide the infundibulo-pelvic, broad and round ligaments. Next the uterine vessels with the surrounding cellular tissue are ligatured and divided. This done, the ureters become easily accessible and are to be separated from the tumor. The bladder itself in its deepest part also should be separated from the tumor and the vagina. Next follows the division of the posterior layer of the peritoneum and the separation of the rectum from the vagina. Isolation now being complete, removal of the organ follows. For this purpose the two layers of the parametrium are taken off as close as possible to the pelvic wall, and the vagina cut across, having just previously been wiped out with dry sterile gauze and clamped off from the tumor above. Every lymphatic gland at all enlarged in the region of the great iliac vessels up to the division of the aorta and downward as far as the obturator foramen must be extirpated. The cavity created by the removal of the tumor is filled in loosely with strips of iodoform gauze, extending down to the vulva, and an exact closing of the peritoneal cavity over this gauze effected by sewing up the anterior and posterior flaps of peritoneum. The gauze is removed in successive strips in from five to ten days. This operation has not only reduced the mortality materially, but has raised the proportion of cases suitable for operation from 15 to 50 per cent. Furthermore, from the more accurate information obtained as to the condition of the parametria and lymphatic glands, it has been learned that in only 40 per cent. of cases can vaginal extirpation be considered a radical operation.

The one distinctive feature of

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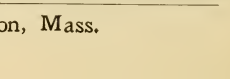

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Relationship Between the Nose and the Female Generative Tract.

Falta (Monatsschrift fuer Ohrenheilkunde) recalls the well-known observations of Fliess relative to the genital spots in the nose, and reports on certain observations of his own, after rehearsing Fliess' theory. The writer found the latter's observations to be correct in quite a few gynæcological cases.

The writer explains this relationship between the nose and the genital organ in the female, on anatomico-physiological grounds, and brings interesting data to bear on the question, among which he cites the fact that the nervous trigeminus, which supplies the genital spots of the nose, is in contact through the ganglion sphenopalatinum with the nervous sympathicus which again innervates the female genital organs.

From this, he draws the conclusion that this relationship should lead to great caution in surgical attacks on the nose in pregnant women, even if the relationship is as yet obscure.

The author cited Fliess' cases wherein after surgical procedures on the nose, abortions supervened. The author was induced to undertake this study because of his experience with two patients in whom, after cauterization of the inferior turbinate, symptoms of pain developed in the ovaries of the opposite side of the body, and menstruation was prematurely induced.

Direct Cystoscopy.

Luys (Bulletin de L'Assoc. Fr. d'Urologie) first describes instruments desired by himself intended to facilitate the direct examination of the mucous membrane of the bladder in the male without the use of any telescope, prismatic or direct, and without the use of any fluid medium in the bladder or the use of air under pressure. It is essentially the method of Kelly and Pawlick. The patient is placed in the Trendelenburg position, and the bladder simply distended by the atmospheric pressure when relieved of the weight of the adjacent pelvic organs. The instrument consists of a simple straight tube like the Kelly cystoscope, but without any funnel at its proximal end. In order to facilitate introduction into the bladder, it is provided with an obturator, the distal

end of which is jointed to form an angle like a coude Mercier catheter, and which can readily be withdrawn after the tube has been placed within the bladder and replaced by a light carrier. In order to facilitate catheterizing the ureters, the author has devised a special form of catheter, with a soft tip, the adjacent portion for a length of 15 cm. being rigid and the remaining portion again flexible. For direct cystoscopy the author claims the advantages that have been generally recognized—namely, that the bladder mucous membrane can be inspected without the use of a fluid medium, which may become clouded by mucous, pus, or blood, and without the optical difficulties of prisms and lenses. While some of these objectionable features are overcome in cystoscopes using air under pressure to distend the bladder, they have not the advantage of the open tube, through which the mucous membrane of the bladder can be directly treated when diseased, and through which foreign bodies and calculi can be removed, and small tumors resected. While a number of histories of cases cited by the author would tend to show that this method has been found practical in his own hands, under conditions even where examination with the prismatic cystoscope has failed, the fact remains that in the male, at any rate, direct cystoscopy must always be a difficult operation. Granted that it is possible in a certain number of cases to find the ureteral orifices, the optical field of a direct cystoscope small enough to readily pass the male urethra must of necessity always be a very limited one, so that even if it does render catheterization of the ureters possible it does not offer a satisfactory method for general inspection of the bladder, the importance of which is only too frequently lost sight of in discussing cystoscopy in general.

Reprint of Editorial from Science Siftings of London, Eng., April, 1905.

HYDROZONE AND GLYCOZONE.—In the Lancet (Nov. 19, 1904), we note the report of an important lecture on abdominal surgery, by Dr. Frederick Holme Wiggin, of New York, in which marked notice is taken of two preparations employed by him for treating the wounds—viz., hydrozone and glycozone.

We have since become convinced, from our own investigations, that these two agents are not only remarkable allies of the surgeon, but products which can be made of the highest possible value in domestic medicine. Though the uses of both are very wide, we will confine our remarks here mainly to hydrozone. This is an exceptionally strong solution of hydrogen peroxide (30 vols.), free from barium salts and superfluous acids. This latter feature is very important; for, it is the presence of these salts, combined with excessive acidity and limited strength, that has diminished the value of the peroxides hitherto commercially produced.

The powerful oxidizing effect of peroxide of hydrogen upon organic substance is recognized by medical authorities throughout the world; but, to test for ourselves the claims of hydrozone as an antiseptic, we made a series of germicidal experiments.

The organism, known as bacillus coli communis, was employed as being one of wide-spread occurrence, and one which is always present in sewage. A vigorous culture of this was grown in broth, and equal volumes of it were exposed to the action of (1) phenol solution (1 in 80); (2) undiluted hydrozone; (3) equal volumes of hydrozone and water; (4) one part of hydrozone mixed with three of water. The action was allowed to continue for two minutes, when a sub-culture was made from each mixture. At the expiration of five minutes, another sub-culture was made; and a third was made at the expiration of ten minutes. These sub-cultures were then incubated at 20 deg. C (68 deg. F), and were examined at the end of 48 hours. Those cases in which the organism showed signs of growth are marked by an * in the following table; those in which no growth was observed are indicated by a †.

No. of Solution.	After 2 mins.	After 5 mins.	After 10 mins.
(1)	*	*	†
	(very slight growth)		
(2)	†	†	†
(3)	†	†	†
(4)	*	*	†
	(very slight growth)		

It is obvious from the foregoing table that hydrozone is a great deal more powerful in its action on the organism employed, than is 1 in 80 carbolic. It was also shown that glycozone (undiluted) is about equal to 1 in 80 carbolic.

These experiments fully confirm the claims made for hydrozone and, also, indicate one of the causes that render it so effective a cure for a wide range of maladies. It is not only an antiseptic, but it is an entirely innocuous one; for, while it is capable of destroying pathogenic germs, it is quite harmless to healthy tissue. This, of course, cannot be said of carbolic.

The healing action of hydrozone is obvious to the unaided eye, for when it is applied to a diseased surface, it may be seen stimulating healthy granulations and gradually building up the tissues. We have seen its effect on a large number of lesions which cannot be enumerated here. It acts as ozone does; and, like nascent oxygen itself, when applied to a wound it increases the circulation and acts as a stimulant. Immediately the liquid is applied to an open wound, an effervescence commences and the wounded tissue can actually be seen uniting by a process of granulation, the healthy tissue proliferation being extremely rapid. The cessation of the effervescence indicates the destroyal of the pus.

This, however, is only one of its uses, for the internal administration of hydrozone has long been recommended. In infectious diseases and in diphtheria there can be few things to equal it, owing to the property it possesses, as shown by our experiments, of destroying low organisms. The range of diseases for which it is recommended is wide. It covers diseases of the nose, throat and chest; diseases of the genito-urinary organs; inflammatory and contagious diseases of the alimentary canal; skin diseases; diseases of the ear and the eye; and many dental conditions.

Glycozone may be regarded as an adjunct to hydrozone. Its effect is slower; but, as a dressing, after hydrozone has been applied, it acts most efficiently, continuing the work commenced by hydrozone. Sometimes hydrozone, taken internally, causes slight nausea, then it is well to commence with the milder glycozone.

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are satisfied that the general claims advanced—vouched for as they are, by the widest medical authority—are not by any means excessive. To Professor Marchand we award the Science Siftings' Certificate of Merit.—Abstract of Editorial from Science Siftings, London, Eng., April 8, 1905.

Entero-Colitis.

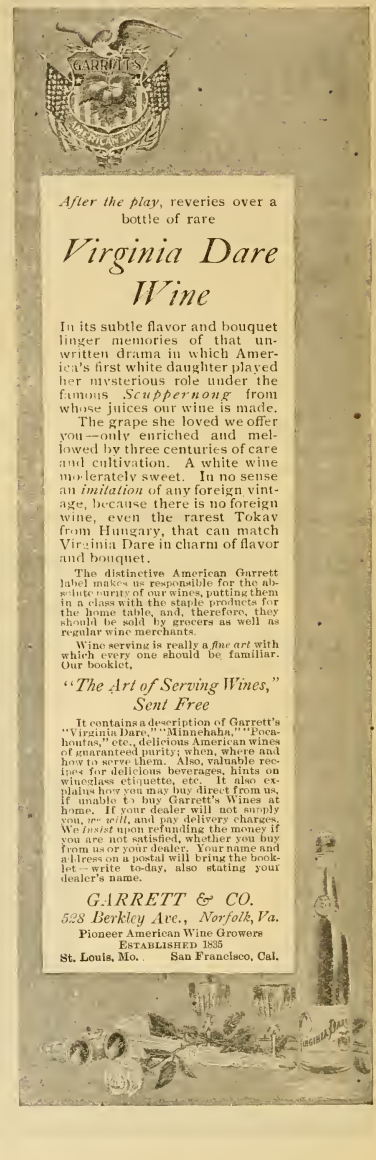
I was called last August to see an eight months' old boy who was said to be dying of cholera infantum. He had been treated by two capable men, both of whom agreed that the child could not possibly outlive the day. Every conventional remedy had been tried and the favorite methods of both men had been exhausted. They frankly admitted that all had been done that could be done. I found the patient almost moribund and displaying all the symptoms of a child dying of what I diagnosed as entero-colitis. The symptoms, to my mind, were classic, despite the previous diagnosis. The case was turned over to me at 9 a. m., Aug. 7th. A trained nurse was already on this case. She is an unusually competent woman, in whom I have the most implicit confidence. Then began one of the hardest battles of some years in my practice. I ordered high enemas of Glyco-Thymoline in 25 per cent. solution and warm. Used four ounces at a time with a soft rubber catheter once every three hours. The child could retain nothing, was in frightful pain and passing constantly thin, foul smelling discharge tinged with blood. The child was emaciated to the last degree and for several days before I was called had been in a semi-conscious state. The poor little baby was a pitiful sight. For nourishment I ordered several combinations to be administered, an ounce at a time, as a rectal clyster following the enemas of Glyco-Thymoline.

I know it is not good practice to give hypodermics to an infant, but this was a grave case. My predecessor had ordered gr. 1-64 morphine, gr. 1-960 atropin, sub. q. every four hours if needed, with strychnine 1-240 gr. if necessary. I continued this as the baby was often in intense pain and there seemed to be no other way. This was my plan of campaign, and I am both thankful and pleased that it was successful. The baby improved from the first, but so slowly that it was scarcely discernible to the parents, but the nurse and myself saw it. After three days the child could take some nourishment per oram. I then gave 2 m. Glyco-Thymoline in one ounce of water every two hours before feeding. It began to have short periods of natural rest and the discharges were in every way improved. At the end of a week, Aug. 14th, the improvement was quite marked, but we did not relax our vigilance. The hypodermics, except of strychnine, were discontinued. The enemas were continued fifteen days, once every three hours, then at less frequent intervals for a month, then once a day for six weeks. The recovery of the little patient was long and slow, but uneventful The mother and nurse were devoted and ably seconded my efforts. At this time the baby is a strong rosy youngster.

It gives me great pleasure to tell you of this case. The experience may be of value and it certainly proves to my satisfaction at least, the potential possibilities of Glyco-Thymoline in gastro-intestinal work. May you be speeded in your good work.

O. W. COBB, M. D.

Easthampton, Mass.



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Albuminuria and Nephritis in Infancy.

Ballie (Rev. di Clin. Ped.) states that the common occurrence of renal alterations in babies is acknowledged, owing to the frequency of infective maladies, such as diphtheria and scalatina. There is an incomplete evolution of the kidneys in young babies, and it is necessary that they should adapt themselves gradually to the demands of life. This functional evolution can be disturbed by various causes, especially by the too early administration of foods that are not adapted to the ability of the digestive organs. Aimonzio has demonstrated a form of albuminuria due to the occurrence of kidney troubles and eclampsia in the mother, the toxic agents producing alterations in the kidneys of the child as well. The kidneys of the infant may also be affected by cold. Certain skin diseases produce albuminuria, due to the absorption of poisons from the cutaneous lesions, or to the medication. Albuminuria is much more frequent than has been believed. Of 250 babies, between two and nine months old, examined post mortem by Goulkewith, 22 cases showed renal alterations, with hyperemia of the capillaries, leucocytosis in the glomeruli and canaliculi, necrosis, fatty degeneration of the cortical epithelium, and interstitial hemorrhages. Many cases attributed to dentition are really cases of kidney disease. Scrofulous nephritis is very frequent. Next in frequency in infants is nephritis of diphtheria, then of measles and malaria. It may result also from dyspeptic troubles, especially when they cause eclampsia. In these cases albumin is abundant in the urine. Bronchopneumonia also is a cause of nephritis in infants. Scleroderma in infants is simply a form of subcutaneous edema of nephritis. There are renal complications in 23 of 70 infants under one year, seen by the author. There are many cases of nephritis in which albuminuria does not exist, and hence a diagnosis cannot be made by chemical examination of the urine. In the author's cases there were four in which casts were found, while albuminuria was not present. Hence the importance in babies of systematic examination of the urine, including the microscopical study examination.

Is Syphilis a More Serious Disease than Gonorrhea?

Doctor (Zent. f. Gyn.) says that the venereal diseases are even more serious than tuberculosis and cancer, producing more suffering and more deaths. The immense number of cases of venereal disease should be taken into account in estimating the evil effects of disease. The gynecologist realizes that they are as frequently the cause of death as tuberculosis or cancer, although somewhat more indirectly. Gonorrhea produces disabling gynecological troubles that are worse than death, such as sclerosis, ovarian abscess and pelvic adhesions. Extrauterine pregnancy often arises as a result of such troubles, by the adhesion of the tubes to the uterus or ovaries, loss of the ciliated epithelium, and purulent inflammations. Septicemia in pregnancy may also arise from the gonococcus. Venereal diseases, whether recognized or not by the wife is the cause of untold family disagreements and sufferings. Childlessness and sterility add to the sorrows. Syphilis attacks 30 to 40 per cent. of the poorer classes; in England it is given as 80 per cent. Gonorrhea is even more frequent. The intelligent patient undertakes efficient treatment of syphilis, while he allows his gleet to go untreated as unimportant. The danger of these two diseases is great enough to enlist the fighting power of all physicians.

Version and Disengagement of the Arm.

Apfelstedt (Berl. Klin. Woch.) calls attention to the chagrin of the accoucheur who has performed version and delivers a dead child, or one with a broken arm. Both of these accidents are liable to occur in breech deliveries, on account of the arm becoming displaced and extending on the shoulder, as the body of the child is descending through the pelvis. When this takes place the delivery is retarded so as to sacrifice the life of the child, or the arm is fractured. This is due to a change in the attitude of the fetus during version, the child becoming limp, not from partial espyxia, as might be supposed, but from changes in the muscular tonus of the child due to long delay in delivery. The normal tonus of the muscle being lost, the arm often becomes extended, instead of remaining against the chest. The prevention of this accident lies in combining with version the process of disengagement of the arm. The uterus contracts about the body of the child and would push the arm upward. The proper use of the internal hand in version is of the greatest importance, as well as which foot is brought down. In the first position the left hand enters the vagina, the right being placed on the fundus externally. The left ruptures the membranes, passes over the nearest shoulder, along the forearm to the elbow, seizes the arm so that elbow and forearm lie in the palm of the hand, and brings it down over the hip, extended, into the vagina, until it reaches a position of abduction. The corresponding foot is seized and brought down into the vagina, the right hand aiding these movements from without. Version is completed as usual.

Albuminuria in Infantile Tuberculosis.

Benati (Rivista di Clin. Ped.) says that albuminuria occurs in infantile tuberculosis more frequently than has been supposed. It varies much in severity, according as the tuberculosis is acute or chronic. In acute and subacute forms it is generally slight, while in chronic forms it is serious and permanent. The renal lesions may begin as mere congestion and go on to glomerule-nephritis, and end in large white kidney or in amyloid degeneration. The etiological factors are various: In some cases there is a mixed infection; in others there is an autointoxication arising from the

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gastrointestinal tract or other organs; again it is due to mechanical factors, such as disturbances of circulation; or it may arise from the condition of the blood or from tubercular cachexia. He has collected 111 cases seen at the Children's Hospital in Florence, between the years of 1892 and 1898, in all of which the diagnosis by physical signs was confirmed by bacteriological examination. In these cases tuberculosis was rare during the first two years, increasing in frequency with age, and was most frequent from the fifth to the seventh year. Renal disease occurs most frequently in combination with tuberculosis. He says that the diease is more common than has been supposed; that albuminuria is more liable to occur when the tuberculosis has become generalized or has attacked several organs, and when the condition has become serious, especially before a fatal issue. It occurs in 60 per cent. of tubercular meningitis.

Leucocyte Counts in Pulmonary Diseases in Children.

Heiman (Arch. of Ped.) says that there is present in broncho-pneumonia of children a well-marked leucocytosis, independent of the amount of lung involved, and bearing no relation to the height of the temperature. The general rule is that failure of the leucocyte count to drop when the pulmonary signs disappear indicates either a complication or a fatal termination of the illness. A constant and considerable leucocytosis may regularly be expected in the lobar pneumonia of children, in about the same degree as in broncho-pneumonia (bronchopneumonia, average in 19 cases, 33,900; lobar pneumonia, average in 24 cases, 31,700). The leucocytosis in lobar pneumonia differs from that in broncho-pneumonia in that the white count is higher when the pulmonary involvement is greater. If in lobar pneumonia two or more lobes are involved a relatively high count may be looked for The leucocytosis in lobar pneumonia is in no way related to the degree of temperature. An increasing leucocytosis is the general rule, reaching the maximum just before the crisis. While failure to drop before the crisis may indicate a complication, this may be of no special significence. The precritical drop is inconsistent, of little or no prognostic value, and cannot be utilized as a means of deter-

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mining the time of crisis. There is a high leucocytosis at the onset of empyema in children. In general, the diagnostic value of the leucocytosis in pulmonary affections of children is limited. It is of great aid, however, when resolution and the drop in the leucocytosis have occurred in labor pneumonia and there are present signs that suggest the onset of empyema. Frequent blood counts at regular intervals, showing a sharp rise in the count, furnish strong presumptive evidence of a supervening empyema, providing other causes of leucocytosis can be excluded.

Etiology of Summer Diarrhea in Infants.

Volpino (Arch. per le Sci. Med.) says that the bacterial element in the causation of summer diarrea of infants. Such cases have been described to the presence of bacillus coli communis, or bacillus lactis aerogenes. He has found constantly in the feces of severe, as well as slight, cases a bacillus belonging to a species intermediate between bacillus coli and bacillus typhosus, which he calls bacillus enteritidis infantum. The author made examinations of 18 cases of summer diarrhea of severe type, seen at Turin. The bacillus showed itself more virulent than bacillus coli communis to animals. Its constant presence, its pathogenic characteristics and its agglutinability with serum of babies sick with gastrointestinal troubles show that it may be an important factor in the causation of summer diarrheas. This germ is not found in the feces of normal suckling infants, while in two cases of artificial fed babies, whose stools are always more or less abnormal, the germ was found.

Myotonia Congenita.

Meare (Arch. of Ped.) describes an instance of the condition in a boy ten years of age. The only incident in the previous history were measles and pneumonia. The child was late in walking and stiffness of the muscles of the legs was first noticed at two years of age. The whole body was then "rigid," but there were no convulsive seizes. From three to six years the condition was worse than since. Examination showed unusual development of all muscles, and a stiffness accompanying the initation of every muscular movement. This would pass off on continuance of the effort, recurring when motion was attempted after rest. The more haste in trying to make a motion the greater the difficulty in accomplishing it. Reflexes and sensations were normal. The reaction to faradism was continuous tetanic contraction, and took place in response to a much weaker current than in the control cases. The muscles were easily excited by the galvanic current, as much response being abtained to 10 melliamperes as to 20 in the controls. Cathodal closure contraction was marked; cathodal opening contraction, negative; anodal closure contraction marked, but less than the cathodal. Response to closure of the current was slower than in the controls, but fairly prompt. On stroking the muscles with the current closed at the cathode a prolonged vermicular contraction was observed, continuing after removing the pole. This was less distinct with the current closed at the anode. A sharp blow upon the muscles was responded to by vermicular contraction, the movement passing slowly like a wave along the muscle.

Prophylaxis of Tuberculosis in Children.

Graucher (Riv. di Clin. Ped.) says that tuberculosis is a contagious disease, and is contracted by children almost always in the family circle; in the adult it is often the result of an infantile infection, which has lain latent and unnoticed. The most important measures for defending the race against the disease is the preservation of the infant. Prophylaxis lies in preventing family contagion. Tuberculosis is more curable in infancy than at any other period of life. As prophylactic measures the house must be made healthy and dry; milk used for nutrition of the child must be sterilized; if there be tubercular persons in the family, the baby must be removed and hygenic measures instituted. In school the rooms must be well ventilated and lighted; there must be gymnastic and breathing exercises; cases of tuberculosis must be systematically sought after amount the scholars by physicians, and the affected children treated at once by better food, open air classes and by removal to marine and mountain sanitaria.

Hyperemesis Gravidarum.

Dirmoser (Zent. fur. Gyn.) gives his observations on twenty cases of vomiting of pregnancy, from which he advances the theory of autointoxication. The writer observed a case of eclampsia with pernicious vomiting. It occurred not at the end of pregnancy, but at the close of the third month, and there was only a small amount of albumin in the urine. He believes that there was a relation between the pernicious vomiting and the eclampsia. The poison produced by the hyperemesis caused the eclamptic seizure. Possibly this poison was acetone, which was found in considerable amount in the urine of this patient. The cause of the toxin production is believed to be not the fetus, but the increased amount of work falling upon the gastrointestinal tract. The growing fetus, through a reflex effect on the secretory function of the vagus nerve, influences the metabolism of the mother, and the intermediate products of the transformation of albumin are thrown into the circulation instead of being excreted by the kidney. This theory is supported by the finding of indoxyl skatol, acetone and acetic acid in the urine and the increase of uroglin, peptone, etc. Eclampsia is due to an increase of ammonia compounds, the sign of a failing liver action. The liver, instead of transforming the products of albumin into such as are eliminated by the kidneys, throws them into the circulation. Among these are a number of am-

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monia compounds, leucin, glycocol, etc. which are regarded by Zangenmeister as a cause of eclampsia. Others believe the cause of the poisoning to be rather the lack of digestive power of the intestine than the failure of the liver.

The Treatment of Heart Failure in Diphtheria.

Bolton (The London Medical Lancet) says that the treatment of diphtheria was directed solely against the local lesion, but the modern conception of the disease regards it asa systemic intoxication which cannot be prevented by a direct treatment of the local lesion. The latter is alone dangerous when it mechanically obstructs the larynx. The poison directly attacks nervous and muscular tissues; in the acute stage of diphtheric toxemia acute degenerative changes occur in the nucleus of the vagus and there is fatty degeneration of the muscular fibres of the heart. The muscular power of the heart is lowered and its regulative method is intefered with. A large amount of the poison may suddenly overwhelm the heart and nervous system, but the later changes do not cause death unless there is some strain which the heart is unprepared to meet. The majority of patients if if they survive the acute stage show some signs of heart failure, such as irregular action or dilatation. In treating the heart failure antitoxin in indicated, but there are certain auxiliary measures which are necessary. To prevent heart failure the antitoxin should be administered at the earliest possible moment, as in this way the toxin is neutralized. In administering antitoxin from 4000 to 6000 units should be the minimum dose for an ordinary case. In the more severe cases from 12,000 to 24,000 units should be given at once, and if on the following day there is no improvement in the local conditions the injection should be repeated. There is no danger in the antitoxin, and such complications as rashes, joint pains, etc., are quite as likely to follow small injections as large ones. Besides the severity of the case as a guide to the dosage of antitoxin, the time at which it comes under treatment is of importance, a larger dose being necessary on the third or fourth day than is necessary on the first or second day.

Next to the administration of antitoxin is rest, both physical and mental. In the acute stage of the disease sudden death may occur at any time from the strain of vomiting or rising suddenly in bed. If the acute stage is survived and the patients is left with signs of heart failure, due to changes not in themselves sufficient to kill, strain may determine a sudden death. If there are no signs of heart failure the strain of getting up too early in the progress of the disease often initiates them, thus evidencing the latent heart weakness. Rest should be insited upon after the acute stage has passed, as the patients naturally remain in bed when acutely ill. In fatal cases the first signs of heart failure come usually about the end of the first week, and death generally occurs within the first fourteen days. The signs are generallly irregularity and weakness of the pulse, together with undue rapidity or slowing. A small, irregular pulse is of bad prognostic import. The first sound of the heart is short and feeble and the pulmonary second sound accentuated, the impulse being diffuse and slapping. When these signs are present the patient should be kept in a recumbent position with the head low and be disturbed as little as possible. Vomiting is especially dangerous, and great care must be exercised in administering food. Patients should be kept in bed three weeks from the onset of diphtheria. If at the end of that period there is no irregularity of the pulse and no signs of dilatation, they may begin to sit up, and at the end of the fourth week be allowed to walk. If decided signs of dilatation are present and there is an irregularity of the pulse, the patient may have to be kept in bed for weeks or months. Rest should be continued until the symptoms have disappeared, or after three months if they still persist the patient may be allowed to sit up and gradually regain his old habits. As a rule drugs are of little value in the treatment of cardiac complications of diphtheria.

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better knowledge of which streptococci are harmless and which are virulent, so as to know when the serum ought to be injected, and what cases will recover without it. In studying immunization with the serum we must take into account the virulence of the streptococcus, the resistant power of the individual, and other factors. Under prophylactic injections the author includes six cases, three of salpino-oophorectomy with peritubal hematocele, two of total extirpation of uterus and adnexa for myomata by abdominal operation, and two by way of the vagina. All of them were cured without any rise of temperature or pulse ferquency. They were injected three of four hours before operation with 10 c. c. of Menzers' antistreptococcus serum.. The injections are painless and produce no reaction. Twelve cases of abdominal total extirpation for carcinoma were injected in the same way; nine of the recovered quickly without any reaction. One patient died some time after healing of the wound, of embolism of the lungs from thombosis of both femoral veins. One other had a moderate peritonitis from which she recovered, and one died of peritonitis in spite of the injection. As a therapeutic measure the serum must be given as soon as the diagnosis is established, as we cannot hope for good results after the infection is well developed and deposits of pus and exudates have formed. In six cases of streptococcic endometritis injected the best results were obtained; these were confirmed by bacteriological examinations. A beginning infection with rise of themperature had set in, and the reaction lowered the temperature at once and the infection went no further.

Relation of Hysteria and Other Functional Neuroses to Gynecological Troubles.

Meyer (Monatsschr. f. Geb. u. Gyn.) defines hysteria as a functional derangement of the brain powers in which directly or indirectly the psychical element plays the important part. Hysteroneurasthenia is combination of symptoms of the two diseases. Cases of grave hysteria, with convulsions, paralyses, alterations of sensibility and stupor are comparatively uncommon. Most cases are of the moderate type. There can be no doubt that hysteria is much more frequent in the female than in the male; the neuropathic tendancy and ancestry also are important predisposing causes. Chronic intoxication from alcohol, lead, etc., infections, especially syphilis, chlorosis and anemia, and wasting diseases are also causes. But the psychical causes are, after all, the most important; such as trauma and other mental and nervous factors. It cannot be denied that in many women with perfectly healthy genital organs the approach of menstration or the climacterium, pregnancy, the puerperium and lactation determine peculiar nervous symptoms that are well known. Most cases of genital disease are accompanied by nervous symptoms. At the same time it is noticeable that the severest of these symptoms appear in those women who have the slightest complaints, such as endometritis and slight ulcerations and displacements, while those who suffer from severe pelvic inflammations, ovarian growths and cancer are not subject to the ordinary nervous symptoms. Of forty-two cases treated at the Konigsberg Polyclinic, from April to October, 1905, for hysteria, neurasthenia and similar troubles, seven were affected wth gynecological diseases; the gynecological treatment given them in no way benefitted the nervous symptoms. Cases needing such treatment should receive it, but there is no good reason for treating every nervous case from a gynecological standpoint, whether it shows symptoms or no. He says that in persons having no genital troubles men and children as well as women, there may be similar symptoms which we call hysterical. These may be effected by genital diseases, but the most important element in their causation are of a psychical nature. There is no ground for the theory that hysteria arises from a sort of reflex action or irritation from various organs. Gynecological treatment seldom gives permanent good results in hysterical cases. The sexual organs and their diseases not only do not have much effect upon these neuroses, but many authors hold that the contrary is the case. At the same time hysteria often begins after sexual excess, or intercouse at the time of puberty.

Miscellaneous.

The Importance of an Active Liver.

A normal state of health is the sum total of the proper performance of the functions assigned to the several vital organs. These functions are so interdependent in their attainment of the end, that a disturbance in one is reflected throughout the entire system. With all the organs functionating in harmonious unison there is the state known as normal health. This state is departed from in the degree that one of the integral parts of the whole fails to perform properly through falling out of adjustment.

This especially holds good in regard to the liver. The liver is the largest organ in the body, and the part it plays in the metabolic processes of the human economy is not secondary to that of other organs. A host of ailments may be directly traced to a derangement of hepatic action. It may be accepted, that an active liver insures a fair degree of, if not perfect, health. But let there be the least departure from normal, and pronounced results are apparent. The digestive processes are so dependent upon a free liver secretion and excretion that gastric and intestinal disturbances quickly follow any interference with these hepatic duties. It thus follows that there must be no interference with the flow of bile if health would be preserved.

The profession so well recognizes the influence of a perverted hepatic function as a factor in interfering with the regular physiological processes, that it almost instinctively turns its attention to the liver and takes steps to set it right. With the average physician it is a routine practice to administer a cholagogue, and results would seem to justify this procedure. If the liver is not primarily at fault it is affected secondarily, so no exception can be taken to this rule. For this purpose calomel, phosphate

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of soda and other drugs are in common use, but none has a worthier name as a cholagogue than Chionia. Chionia is the active constituent of chionanthus virginica and in the process of manufacture the inert and objectionable parts of the plant are eliminated. This agent has long been known as a valuable addition to modern drug lists and its extensive use among physicians, who get results, is evidence that it is a preparation of much merit.

It is commouly used in hepatic torpor, a condition calling for direct stimulation of the liver cells. It stimulates the cells in efficient manner, producing a healthy secretion of bile and aids in its discharge into the intestinal canal. In jaundice it ameliorates the condition by providing a normal flow and securing an outlet for the bile pigment. It is valuable in constipation, not through any purging effect, but by its influence on the liver. In chronic constipation it is of particular efficiency. The ordinary dose of Chionia is one or two fluid drachms three or four times a day.—The Medical Mirror.

Blood Impoverishment.

In meeting that condition of the system embraced in the above headlines, is it not true that our first thought, and that to which our instinct naturally leads us, is iron; but viewed from the standpoint of now accepted scientific facts, is this not looking at but one phase of the question? That there is a deficiency of iron in the blood in most forms of anemia is, of course, indisputable; and to endeavor to supply this lack by the administration of iron seems but a common sense procedure. This practice

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would be sufficient if anemia were, in reality, nothing more than a condition of iron deficiency; but modern physicians know that the real underlying causative factor is a disturbance of the complicated processes of nutrition and metabolism, and that iron poverty is but one manifestation of this disorder. Sufficient proof of this fact has been presented to every physician when he has observed how anemic conditions persist in spite of the long continued administration of iron. Here, then, iron must be supplemented by such remedies as have the ability to awaken the depressed nutritive and metabolic processes.

To invigorate, to rekindle nervous force, to revitalize all functions, and thereby bring about a condition of systemic vigor, of which blood-enrichment is necessarily a feature, the addition of Manganese with Iron is desirable. In Pepto-Mangan, Iron and Manganese was first brought to the attention of the profession by Dr. Gude, Chemist, and this preparation is found to be one of the best therapeutic resources of the present-day physician, and when combined with such other remedies as meet the indication, such as we have spoken of, forms at once a therapeutic arsenal whose fortress is impregnable.

Theory and Practice: Sydenham, some 250 years ago, recommended that young men desirous of studying medicine should lay aside their books and read Don Quixote! He had a profound contempt for the book learning of his time. While he knew the current theories, instead of trying to make them the basis of his practice he relied mainly upon observation of the natural processes of the body and their various normal and abnormal manifestations. His aim was to aid Nature and to avoid harming her. Instead, therefore, of the complex remedies and prescriptions of his times he gave simple remedies and carefully watched their actions. He studied his patients and left theorizing to others. And he was wonderfully successful.—American Journal of Clinical Medicine.

The approach of the national holiday, July 4th, suggests to the surgeon the necessity of preparing to handle cases of cannoncracker wounds and other injuries caused by the explosion of fireworks. Many of these, in the nature of things, will be infected with the bacillus of tetanus or its spores, and will require the most scientific treatment to save life. It is necessary only to review the files of this and other leading medical journals to gather a fair estimate of the enormous sacrifice of life that this country makes every year in celebration of Independence Day, and it behooves every medical practitioner to be prepared to receive and treat each case that presents itself with the best means at his command.

Without repeating the statistical facts that have been cited again and again in support of the prophylactic use of Antitetanic Serum, it is only necessary to say that these facts conclusively prove the value of the Serum as a preventive of tetanus. It is injected in a single dose of 10 cc. immediately after receipt of the injury, and should be repeated ten days later. The wound is to be thoroughly cleansed, avoiding the use of strong solutions or agents that coagulate the albumins, and packed with gauze well charged with Antitetanic Dusting Powder. Antitetanic Dusting Powder is Antitetanic Serum dried and powdered and mixed with a suitable quantity of Chloretone. It is recommended by reliable and experienced medical practitioners as a dressing for the wound in all cases in which tetanic infection is suspected. It is practically odorless and keeps well.

Antitetanic Serum and Antitetanic Dusting Powder are supplied by Messrs. Parke, Davis & Co., and may be obtained through all druggists.

A Successful House.

The Sultan Drug Co. of St. Louis has now been in existence for nearly fifteen years, and its laboratories are under the direct supervision of its president, Mr. F. W. Sultan, a pharmaceutical chemist. Mr. Sultan is a graduate of the Maryland College of Pharmacy, took a special course in quantitative analysis under Professors Simon and Dockery, took the Simon Gold Medal for analytical chemistry in 1884, and has made several achievements in pharmaceutical chemistry, among them Cactina. He was connected with the laboratory of Messrs. Sharp & Dohme, of Baltimore, for nearly ten years, when he organized the Sultan Drug Co. in St. Louis. Mr. Sultan is also Secretary and Treasurer of the Peacock Chemical Co. and is in complete charge of their laboratory. He is justly proud of the critical analysis made of the alkaline bromides found on the English market by Messrs. Helbing and Passmore, the eminent analytical chemists of London, in which it was shown that the salts used in the manufacture of Peacock's Bromides were practically pure and superior to the bromides usually found on the American market. The preparations manufactured by these two houses have always been advertised and offered to the medical profession only in the most ethical manner, and they are indorsed and used by English speaking physicians as well as in all of the civilized countries of the world.—Medical Sentinal.

The enterprise and courage of the members of the San Francisco drug trade were clearly exemplified during the recent disaster. Before the fire was extinguished they placed large orders with the manufacturing chemists. One house ordered 30,000 pounds of Antiphlogistine, and altogether over 100,000 pounds were shipped to the coast upon order within a week.

On a steamer from New York, running up the California coast at the time of the earthquake, were 35,000 pounds of Antiphlogistine, and upon orders from the home office, the emergency hospitals were liberally supplied free of charge.

Treatment of Skin Diseases in Warm Weather.

During the summer months the treatment of skin diseases presents a serious problem to the medical practitioner. Many and varied are the measures at his command, but he may run the whole gamut of the usual local applications without giving his patient the relief desired.

In Pond's Extract Antiseptic Cream, however, the medical profession has an antiseptic emollient for the skin that invariably brings prompt and pronounced surcease from the itching, burning, smarting and general discomfort that characterizes the various skin lesions. In eczema, erythema, dermatitis, pruritus, psoriasis and similar skin affections, Pond's Extract Antiseptic Cream has been found remarkably effective by physicians who have used the Cream in these irritating conditions. It is not only a soothing and palliative application, but will be found to possess true healing properties as well.

The Solubility of "Alkaloidal" Granules.

I noticed in a recent journal that some doctor makes an objection to the granules of the active principles on the basis of their alleged insolubility or slowness of solution in water. Now I want to say to that brother that either he does not use Abbott's "Alkaloidal" granules or, if he does, he is not using them properly. I use them extensively, and have for years, and can truthfully say I have my first granule yet to find that is not soluble in water and will state further that they make a perfect solution. I often even use them hypodermi-

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Listerine is an efficient and very effective means of conveying to the innermost recesses and folds of the mucous membranes that mild and efficient mineral antiseptic, boracic acid, which it holds in perfect solution; and whilst there is no possibility of poisonous effect through the absorption of Listerine, its power to neutralize the products of putrefaction (thus preventing septic absorption) has been most satisfactorily determined.

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Listerine Dermatic Soap contains the essential antiseptic constituents of eucalyptus (1%), mentha, gaultheria and thyme (each ½%), which enter into the composition of the well-known antiseptic preparation Listerine, while the quality of excellence of the soap-stock employed as the vehicle for this medication, will be readily apparent when used upon the most delicate skin, and upon the scalp. Listerine Dermatic Soap contains no animal fats, and none but the very best vegetable oils; before it is "milled" and pressed into cakes it is *superfatted* by the addition of an emollient oil, and the smooth, elastic condition of the skin secured by using Listerine Dermatic Soap is largely due to the presence of this ingredient. Unusual care is exercised in the preparation of Listerine Dermatic Soap, and as the antiseptic constituents of Listerine are added to the soap after it has received its surplus of unsaponified emollient oil, they retain their peculiar antiseptic virtues and fragrance.

A sample of Listerine Dermatic Soap may be had upon application to the manufacturers—

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Bronze Medal (Highest Award) Exposition Universelle de 1900, Paris

cally and we all know that anything insoluble cannot be used with any degree of satisfaction or safety that way—of course I refer to those containing drugs that are soluble in water. Allow me to say, in defense of the "Alkaloidal" granules, of which I have on hand almost their entire list, that I find them of uniform strength and that they always give me excellent satisfaction.

Like many good things, Abbott's "Alkaloidal" granules are imitated and with the usual result that all imitations are decidedly inferior. Dr. Abbott has done a great work for the medical profession and should have its unqualified support. No unprejudiced physician can reasonably object to his goods or his methods; and those who do for us unstintingly, as he does, should be protected from piracy by our patronage, as far as possible. So much in defense of Abbott's Alkaloidal granules and in the interests of fair play.

DR. P. M. HOWKINS,

Kraig, Texas.

Making Sufferers Comfortable.

As has been frequently stated, the special province of the physician is to relieve pain. To do so without producing a drug habit, or in some way jeopardizing the patient's life, has always been a problem. I looked askance upon any drug or preparation purporting to be free from objectionable qualities until I began prescribing antikamnia & codeine tablets a year or so ago. The Antikamnia Chemical Company in their preparation of these tablets, by a refining process known to themselves, remove all the toxic elements from these two drugs, so that no damaging effects result. They produce only the most benign results and there is no tendency whatever to produce a drug habit. I now regard antikamnia & codeine tablets as the ideal pain reliever. Headache and neuralgia are not their only field of usefulness. I find that in chronic and malignant diseases where pain is a marked factor, the antikamnia & codeine tablets relieve pain and make the sufferer more comfortable. Cancer is a condition attended by excruciating pain, but I was agreeably surprised and my patient gratified at the results obtained from these tablets.

I have also had pleasing results from these tablets in both acute and chronic rheumatism. All physicians know how intractable is sciatic rheumatism, but the last few cases I had I prescribed these tablets and I am sure they lessened the duration of the disease. To relieve pain in its incipiency will often abort an inflammatory disease. This preparation certainly has quite a large field of usefulness, and the doctor who once uses it will seldom resort to any other anodyne.

W. T. MARRS, M. D.

Jewett, Ills., May 5, 1906.

The American Medical Association.

That the American Medical Association is being run in the interest of a band of Chicago manipulators, is more and more being recognized by the profession throughout the land.

A good deal of fault has been expressed here in Oregon against Dr. McCormack. This is a needless and mis-directed assault upon a worthy gentleman. McCormack is a good-natured gentleman, one of the best politicians in America, who is employed by the men who control the A. M. A., through the Journal, to go about the country, nominally to "organize" the profession, but actually to feel out the pulse in various localities, lay the wires and provide that at each coming session only the ornamental offices shall go to the "unwashed outside."

Oregon, Washington and Idaho had the largest percentage of members in the A. M. A. as to the entire number of doctors in these States, or any three States in any neighborhood in the United States. The Oregon physicians had raised nearly $25,000 to entertain the A. M. A., and had tried to do their duty in the great work of the annual session of the greatest scientific body on earth. The meeting came to Portland against the wishes of the Journal ring. As soon as the meeting was well over, this ring thought it well to make an attack upon us. It not only sent their bland politician out here to abuse us, but editorially attacked us. They thought that out in this outskirt of the country, they might find supple knees to bend, and if not "what could little Oregon do about it?" There are States in the East where the percentage of membership in the A. M. A. is not one-fourth that of Oregon. If "Organization" is what is wanted, why not work there?—Medical Sentinel.

A Medical Bureaucracy.

Quite a number of people think they are in the ring which controls the A. M. A. Journal. As a matter of fact, a half dozen or at most a dozen people are all who know what the journal is doing.

Reports are sent out yearly of what is done with the very large sums of money which pass through the office of the Journal—about a quarter of a million dollars—which read as nice as for years have the life insurance reports. Other medical publishers cannot exactly see how so much money is being expended.

Because Oregon and the delegates from the Northwest insisted upon Portland being a candidate for the last meeting of the A. M. A., after the ring had determined upon another place for the meeting, and (perish the thought) even secured such meeting, a walking delegate was sent here, nominally to organize, but in fact to see if he could not find something to criticise. He and the Journal then made the heartless attack upon Oregon of which our readers already know. An attack so cowardly as to be almost unthinkable. "Poor little old Oregon," these assailants evidently thought, "these people way out there can do nothing, and we will show how severe we can be. Others, we trust, will appreciate, and that a word to the wise will be sufficient."

They overlook the fact that every great conflagration with plenty of material at hand has yet had to start in a small place.

The editor of the Medical Sentinel was and is President of the Portland City and County Medical Society. As such officer he helped arrange an itinerary for Dr. McCormack in Oregon and Idaho, and allotted one of the regular sessions of the Portland society to this gentleman. For many years there has been a divided opinion in the local society as to limited or more general membership, in which the editor in his individual capacity has been steadily working for the fullest possible membership. The leaders' opposition to fuller membership had long ago conceded the point and membership has been growing by leaps and bonnds for the past two years. The increase last year was 35 per cent. This year, following the A. M. A. meeting, 50 per cent. We believe that Portland has a larger percentage of membership to the total number of doctors than any other city of its size in America! Medical Sentinel.

Directors who do not Direct.

In the Life Insurance swindle it has been shown that although the names of men the very highest in the land have been attached to reports and other printed matter as Directors and Trustees, almost none of these know anything about the internal workings of the organizations which the public had confidingly presumed such directors were assisting to manage. Of necessity, men living in remote places, far removed from Chicago, cannot be expected to know all that is going on there, and their

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acts must be largely perfunctory. We would not assume that such men, high in the profession as some are, who are nominally at the head of the A. M. A. Journal, are knowingly doing wrong. Depew, Morgan and other New Yorkers were not charged with knowingly doing wrong. They merely "didn't know." If people in the home city of a corporation cannot keep in touch with an institution, we may expect less responsibility from those a thousand miles away.

The American Medical Association is the greatest scientific body in the world. Its Journal should be the greatest medical periodical and above every suspicion of being used for ulterior purposes by a band of self seekers who may for the time be in control.—Medical Sentinel.

The Self-Effacement of Local Medical Journals.

The medical journals of the United States are much to blame, in which the Medical Sentinel admits its own part, in building up the medical ring which now, through the Journal of the American Medical Association, has placed itself pretty thoroughly over and above the whole profession of America, in that their columns have always been freely open to anything which should advance the standing of the Journal. Personal advantage has been entirely put one side, and the medical journals have worked earnestly and continuously to build up the Journal of the A. M. A. into the greatest publication of medicine of the land. The fact that the upbuilding of the A. M. A. Journal was certain to do damage to other medical periodicals was well understood by every medical publisher, but the owners of medical journals put their own personal interests one side when considering the Journal of the A. M. A., which they felt was to be the general organ of a great profession.

Having built up the Journal to its present position, which it could not have attained in any considerable degree without the aid of the general and local medical press of the United States, one of the first things which those who have managed to secure control of the periodical have attempted has been to drive out of business every other periodical in the land. Today, under the present management of the A. M. A., in the journalistic field, the Journal is out with its hand against every man. It is a true Ishmaelite. The Medical Sentinel, standing alone in its own limited field, is free to speak of this phase, for it can not to any great extent be injured by the present methods of the A. M. A. Journal. But whether injured or not, and doubtless it is to be made a special object of the kind of insidious warfare the ring so well knows how to carry on, it shall speak for decency and justice.—Medical Sentinel.

Is the A. M. A. Ring "Unbustable"?

When the ring has "properly routed" itself, then the ukase goes out that the meeting for the next year is to be held at the place selected. When the officers have been picked out, then the gum shoe travels of the political supes begin. In each State effort has been made to see that no one is elected a delegate who is "wrong." With a little judicious peddling of blue ribbons and minor offices, the thing is ready to go.

But does it always go?

Not always.

We remember the report of the Place of Meeting Committee at the last session. It was to be kept secret until presented. If it should be discussed, things might go wrong. Like a lot of unruly children, the delegates—eighty or one hundred men—were calmly told that they would not be informed as to the proposed place of meeting until the very end of the meeting.

Chairman Harris of Chicago, with his patent inside report, was finally ready.

With bated breath the anxious delegates listened.

It should have been a moment for humility for them.

But the delegates wanted Portland. The ukase called for another point.

There were other Chicago doctors in the House of Delegates. One of these was Harold N. Moyer. He is not a member of the Chicago ring. He wanted Portland. Of course our own Northwest delegates were for Portland. Moyer spoke. Mackenzie spoke. Others spoke. A ballot followed.

All but 15 votes out of 84 were against the ring.

Portland won.

This is a fair illustration of what may follow if the delegates take it into their heads to exercise their constitutional rights.—Medical Sentinel.

"LIQUID MEDICINE VS. ALKALOIDS!" NOT THE QUESTION.

A Reply to a Misleading Criticism.

In the April number of the Medical Brief there is another article by Dr. Pitts Edwin Howes upon the "Superiority of Liquid Medicines Over Alkaloids," a reply to an editorial in the February number of The American Journal of Clinical Medicine.

His argument rests on an unstable foundation, even the name of the article: Why does Dr. Howes try to oppose "liquid medicines" to "alkaloids"? Must we assume from this that liquid medicine in order to be good must be free from alkaloids, or that alkaloids can never be administered in a liquid form? The proposition as he states it is an absurdity: If he had proposed to discuss Liquid Medication vs. Dry Medication we might both have been fighting on the same side, for we are perfectly willing to admit that there are some medicines which are best administered in the liquid form, just as we believe that for the vast majority of the alkaloidal salts and active principles, all things considered, the granule form is the best. We do not, never have and never shall say that liquid medicines are necessarily unreliable and advise against their use. OUR FIGHT IS NOT AGAINST LIQUID REMEDIES BUT AGAINST UNCERTAIN REMEDIES IN ANY FORM. Is that plain enough?

The real contention of Dr. Howes, is however that the tincture or other fluid preparation of the plant is more effective than the alkaloids or active principles contained in the plant. Though he does not say so we shall assume that he believes that it is a good thing to have the active principles in his tinctures. That this is the general desire of medical men is shown by the facts that the better class of pharmaceutical manufacturers now assay all their drugs as to alkaloidal content, and that assay processes have been introduced into the United States Pharmacopeia for practically all of the most

Antiphlogistine

(Inflammation's Antidote)

Entero-Colitis, Cholera Infantum, Peritonitis.

In acute inflammatory conditions of the intestinal tract Antiphlogistine will be found of great value. It will not take the place of proper diet and internal medication, but by relieveing the local congestion and soothing the nervous system, it will be found to be an inestimable adjuvant.

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potent drugs, In other words, the test of its purity is the determination of the amount of alkali or alkaloids which a drug contains.

Dr. Howes rests his case as to the superiority of the tinctures on three points: (1) They are more easily absorbed; (2) they exert their action more in conformity with Nature's laws; and (3) they represent the product of Nature's laboratory.

"They are more easily absorbed." Now that depends. Sometimes an alcohol dissolved remedy is absorbed more readily than a water-dissolved remedy—but there is not an iota of evidence to show that the tincture of the whole plant will be taken up by the stomach or any other portion of the digestive canal any quicker than an alcoholic solution of its most important alkaloid. Indeed, the evidence all points the other way. The simpler the mixture, the less encumbered with tannic acid, dirt and other useless substances, the more ready absorption. Isn't that common-sense?

Absorption depends not upon one factor but upon many: the portion of the canal from which the drug is most readily taken; whether it be readily soluble or not; what it is most soluble in; whether it is to be taken fasting or with the meal; the state of the gastric chemistry; the presence of inflammatory lesions; and the chemical changes which it must undego before it can be taken up by the circulation. That the soluble alkaloidal salts and other active principles are taken up rapidly, sometimes with lightning-like rapidity, when given in granule form, we have never seen disputed by those who use them. Let the skeptic try granules of glonoin, aconitin, strychnin, pilocarpin, atropin-letting them dissolve on the tongue—and report any slowness.

"Liquid medicines exert their action more in conformity with Nature's laws, because they more nearly resemble Nature's method of reproducing her own products."

As regards this proposition we do not recall any instance in Nature where plant life demands an alcoholic solution of its food—or where it gets it. Where is the analogue to the alcoholic tincture in Nature? Does Dr. Howes propose to dispense with all the valuable remedies which are extracted from the plant by alcohol and not water, beause Nature doesn't use alcohol? To be consistent to his alleged fidelity to Nature he should do so.

The complex chemistry of plant life is, coming to the Argument of "adaptation", wonderful indeed; but it certainly needs no argument to show that the growing plant must first of all provide for itself. Every individual, whether a man or a cabbage, must first look after its own needs If it did not take the things essential primairly for its own growth and reproduction it would die and its usefulness would cease with it. Isn't it a remarkable assumption (for assumption it is and nothing else) that this plant or that grows expressly and primarily that man may extract certain medicine from it? Would Dr. Howes have us believe that through thousands and thousands of years untold billions of foxglove have sprouted, leaved, bloomed and died that some man may have a dose of tincture of digitalis?

Furthermore, Dr. Howes assumes that the whole plant must have been created to make a medicine for man, since he argues that the liquid medicines are better than the alkaloids, because "the former represent the whole plant, and the latter only a part." If this is true why does he not use the entire plant instead of simply the alcohol-soluble fragment? To be consistent, when he had an appetite for cocoanut he should commence at the root, gradually eat his way up through stalk and leaves and taper off with the shell and finish with the nut. If animal food appeals to his appetite he should go back to the African savage and eat hide, hair and entrails. The milling of grains should become a lost art. Cooking or other chemical processes which change or modify the chemistry of nature (which he prizes so highly) should be rejected. He should dress in the untanned skins of beasts and return to the customs of the cave-dwellers, since in every phase of life we are attempting to improve on the chemistry of Nature. Instead of giving his patients iodine he should set them to chewing kelp; should prescribe sea water instead of the bromides; in lieu of the mercury salts should lay in a stock of cinnabar; and when he has a case of rheumatism to deal with should order his patients "back to the woods", where birch twigs are available in sufficient quantity.

As a matter of fact, Dr. Howes does not give his patients the whole plant: Of some plants he takes only the root, of others the bark, of others the leaves, and of still others the fruit, Selection in every instance of the part richest in the potent alkaloids. Nor does he take all of this part; he extracts from it a small portion only, usually what is soluble in alcohol—a substance normally foreign both to the animal and vegetable body. Instead of using the whole plant he employs simply the fragment of a fragment —and here he shows his wisdom. His real aim has been to abstract from that "whole" plant only the part which he needed—and if he had gone a step farther he would have succeeded better.

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See Letter from Surgeon-General;

In reply to your letter dated November 8th, 1900, with enclosure from Robert Halford, Agent, dated Mount Lebanon, N. Y., October 6, 1900, and stating that you had sent by express two samples for "Veratrum Viride," I have to state that they were sent to Washington Barracks, D.C., for trial and found to be of excellent quality.

(Signed) GEO. M. STERNBERG, Surgeon General' U. S. Army.

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